

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptal623kxg

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

\*\*\*\*\* Welcome to STN International \*\*\*\*\*

NEWS	1		Web Page for STN Seminar Schedule - N. America
NEWS	2	OCT 02	CA/Capius enhanced with pre-1907 records from Chemisches Zentralblatt
NEWS	3	OCT 19	BEILSTEIN updated with new compounds
NEWS	4	NOV 15	Derwent Indian patent publication number format enhanced
NEWS	5	NOV 19	WPIX enhanced with XML display format
NEWS	6	NOV 30	ICSD reloaded with enhancements
NEWS	7	DEC 04	LINPADOCDB now available on STN
NEWS	8	DEC 14	BEILSTEIN pricing structure to change
NEWS	9	DEC 17	USPATOLD added to additional database clusters
NEWS	10	DEC 17	IMSDRUGCONF removed from database clusters and STN
NEWS	11	DEC 17	DGENE now includes more than 10 million sequences
NEWS	12	DEC 17	TOXCENTER enhanced with 2008 MeSH vocabulary in MEDLINE segment
NEWS	13	DEC 17	MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS	14	DEC 17	CA/Capius enhanced with new custom IPC display formats
NEWS	15	DEC 17	STN Viewer enhanced with full-text patent content from USPATOLD
NEWS	16	JAN 02	STN pricing information for 2008 now available
NEWS	17	JAN 16	CAS patent coverage enhanced to include exemplified prophetic substances
NEWS	18	JAN 28	USPATFULL, USPAT2, and USPATOLD enhanced with new custom IPC display formats
NEWS	19	JAN 28	MARPAT searching enhanced
NEWS	20	JAN 28	USGENE now provides USPTO sequence data within 3 days of publication
NEWS	21	JAN 28	TOXCENTER enhanced with reloaded MEDLINE segment
NEWS	22	JAN 28	MEDLINE and LMEDLINE reloaded with enhancements
NEWS	23	FEB 08	STN Express, Version 8.3, now available
NEWS	24	FEB 20	PCI now available as a replacement to DPCI
NEWS	25	FEB 25	IFIREF reloaded with enhancements
NEWS	26	FEB 25	IMSPRODUCT reloaded with enhancements
NEWS	27	FEB 29	WPINDEX/WPIDS/WPIX enhanced with ECLA and current U.S. National Patent Classification

NEWS EXPRESS FEBRUARY 08 CURRENT WINDOWS VERSION IS V8.3,  
AND CURRENT DISCOVER FILE IS DATED 20 FEBRUARY 2008

NEWS HOURS STN Operating Hours Plus Help Desk Availability  
NEWS LOGIN Welcome Banner and News Items  
NEWS IPC8 For general information regarding STN implementation of IPC 8

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

\* \* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 11:06:35 ON 13 MAR 2008

=> file polymer medline biosis embase  
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'APOLLIT' ENTERED AT 11:07:03 ON 13 MAR 2008

COPYRIGHT (c) 2008 FIZ Karlsruhe

FILE 'BABS' ENTERED AT 11:07:03 ON 13 MAR 2008

COPYRIGHT (c) 2008 Beilstein-Institut zur Foerderung der Chemischen Wissenschaften  
licensed to Beilstein GmbH and MDL Information Systems GmbH

FILE 'CAPLUS' ENTERED AT 11:07:03 ON 13 MAR 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CBNB' ENTERED AT 11:07:03 ON 13 MAR 2008

COPYRIGHT (c) 2008 ELSEVIER ENGINEERING INFORMATION, INC.

FILE 'CIN' ENTERED AT 11:07:03 ON 13 MAR 2008

USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

COPYRIGHT (C) 2008 American Chemical Society (ACS)

FILE 'COMPENDEX' ENTERED AT 11:07:03 ON 13 MAR 2008

Compendex Compilation and Indexing (C) 2008

Elsevier Engineering Information Inc (EEI). All rights reserved.

Compendex (R) is a registered Trademark of Elsevier Engineering Information Inc.

FILE 'DISSABS' ENTERED AT 11:07:03 ON 13 MAR 2008

COPYRIGHT (C) 2008 ProQuest Information and Learning Company; All Rights Reserved.

FILE 'EMA' ENTERED AT 11:07:03 ON 13 MAR 2008

COPYRIGHT (C) 2008 Cambridge Scientific Abstracts (CSA)

FILE 'IFIPAT' ENTERED AT 11:07:03 ON 13 MAR 2008

COPYRIGHT (C) 2008 IFI CLAIMS(R) Patent Services (IFI)

FILE 'NTIS' ENTERED AT 11:07:03 ON 13 MAR 2008

Compiled and distributed by the NTIS, U.S. Department of Commerce.

It contains copyrighted material.

All rights reserved. (2008)

FILE 'PASCAL' ENTERED AT 11:07:03 ON 13 MAR 2008

Any reproduction or dissemination in part or in full,  
by means of any process and on any support whatsoever  
is prohibited without the prior written agreement of INIST-CNRS.

COPYRIGHT (C) 2008 INIST-CNRS. All rights reserved.

FILE 'PROMT' ENTERED AT 11:07:03 ON 13 MAR 2008

COPYRIGHT (C) 2008 Gale Group. All rights reserved.

FILE 'RAPRA' ENTERED AT 11:07:03 ON 13 MAR 2008  
COPYRIGHT (C) 2008 RAPRA Technology Ltd.

FILE 'SCISEARCH' ENTERED AT 11:07:03 ON 13 MAR 2008  
Copyright (c) 2008 The Thomson Corporation

FILE 'TEXTILETECH' ENTERED AT 11:07:03 ON 13 MAR 2008  
COPYRIGHT (C) 2008 Inst. of Textile Technology

FILE 'USPATFULL' ENTERED AT 11:07:03 ON 13 MAR 2008  
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 11:07:03 ON 13 MAR 2008  
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 11:07:03 ON 13 MAR 2008  
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'WPIDS' ACCESS NOT AUTHORIZED

FILE 'WPIFV' ENTERED AT 11:07:03 ON 13 MAR 2008  
COPYRIGHT (C) 2008 THE THOMSON CORPORATION

FILE 'WPINDEX' ENTERED AT 11:07:03 ON 13 MAR 2008  
COPYRIGHT (C) 2008 THE THOMSON CORPORATION

FILE 'WSCA' ENTERED AT 11:07:03 ON 13 MAR 2008  
COPYRIGHT (C) 2008 PAINT RESEARCH

FILE 'WTEXTILES' ENTERED AT 11:07:03 ON 13 MAR 2008  
COPYRIGHT (C) 2008 Elsevier Science B.V., Amsterdam. All rights reserved.

FILE 'MEDLINE' ENTERED AT 11:07:03 ON 13 MAR 2008

FILE 'BIOSIS' ENTERED AT 11:07:03 ON 13 MAR 2008  
Copyright (c) 2008 The Thomson Corporation

FILE 'EMBASE' ENTERED AT 11:07:03 ON 13 MAR 2008  
Copyright (c) 2008 Elsevier B.V. All rights reserved.

```
=> s hydrophobic(a)polymer(a)dispersion
    20 FILES SEARCHED...
L1      86 HYDROPHOBIC(A) POLYMER(A) DISPERSION
```

```
=> s l1 and plastic?
    23 FILES SEARCHED...
L2      49 L1 AND PLASTIC?
```

```
=> s l2 and starch
L3      25 L2 AND STARCH
```

```
=> dis l3 1-25 bib abs
```

```
L3  ANSWER 1 OF 25  IFIPAT  COPYRIGHT 2008 IFI on STN
AN  11199902  IFIPAT;IFIUDB;IFICDB
TI  POLYMER SOLUTION AND DISPERSION AND A PROCESS OR THE PREPARATION THEREOF
INF  Mikkonen; Hannu, Rajamaki, FI
      Paronen; Timo Petteri, Kuopio, FI
      Peltonen; Soili, Rajamaki, FI
      Tarvainen; Maarit, Rauma, FI
IN  Mikkonen Hannu (FI); Paronen Timo Petteri (FI); Peltonen Soili (FI);
```

Tarvainen Maarit (FI)

PAF Valtioin Teknillinen Tutkimuskeskus, Vuorimiehentie 5, Espoo, FI-02150, FI

PA Valtioin Teknillinen Tutkimuskeskus FI

PPA Valtion Teknillinen Tutkimuskeskus FI (Probable)

AG BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747, US

PI US 2006148943 A1 20060706

AI US 2003-528993 20030925

WO 2003-FI700 20030925

20060111 PCT 371 date

20060111 PCT 102(e) date

PRAI FI 2002-1730 20020927

FI US 2006148943 20060706

DT Utility; Patent Application - First Publication

FS CHEMICAL APPLICATION

ED Entered STN: 6 Jul 2006

Last Updated on STN: 6 Jul 2006

CLMN 16

AB A polymer dispersion or solution containing a hydrophobic polysaccharide, which is dispersed or dissolved in liquid phase, and plasticizer composition of the polysaccharide, whereby at least 10% by weight of the plasticizer composition is formed from alkenyl succinic anhydride. The invention also relates to the preparation of polymer dispersions and solutions and to the films and coatings produced from them. The dispersions according to the invention are stable, and coating with excellent film-forming properties can be prepared from them.

CLMN 16

L3 ANSWER 2 OF 25 IFIPAT COPYRIGHT 2008 IFI ON STN

AN 10088693 IFIPAT;IFIUDB;IFICDB

TI HYDROPHOBIC POLYMER DISPERSION AND PROCESS

FOR THE PREPARATION THEREOF; CONTAINING A MODIFIED STARCH ESTER

DISPERSED IN A LIQUID PHASE WHEREIN THE DEGREE OF SUBSTITUTION (DS) OF

THE STARCH ESTER IS GREATER THAN 1.5.

INF Haasmaa; Kristiina, Espoo, FI

Heikkila; Maija Elina, Espoo, FI

Paronen; Timo Petteri, Kuopio, FI

Peltonen; Soili, Rajamaki, FI

Urtti; Arto Olavi, Kuopio, FI

Vuorenmaa; Jani, Rajamaki, FI

IN Haasmaa Kristiina (FI); Heikkila Maija Elina (FI); Paronen Timo Petteri (FI); Peltonen Soili (FI); Urtti Arto Olavi (FI); Vuorenmaa Jani (FI)

PAF Oy Polymer Corex Kuopio Ltd.

PA Polymer Corex Kuopio Ltd Oy FI (43117)

AG BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747, US

PI US 2002032254 A1 20020314

AI US 2001-970952 20011005

RLI WO 1997-FI410 19970625 Section 371 PCT Filing UNKNOWN

US 1999-202981 19990224 DIVISION PENDING

PRAI FI 1996-2627 19960625

FI US 2002032254 20020314

DT Utility; Patent Application - First Publication

FS CHEMICAL APPLICATION

ED Entered STN: 16 Apr 2002

Last Updated on STN: 4 Nov 2002

PARN This application is the national phase under 35 U.S.C. section 371 of prior PCT International Application No. PCT/FI97/00410 which has an International filing date of Jun. 25, 1997 which designated the United

States of America.

CLMN 6

OF 25 IFIPAT COPYRIGHT 2008 IFI on STN

AB The invention relates to a hydrophobic polymer dispersion and a solvent-free process for the preparation thereof. According to the invention, the dispersion contains starch ester together with dispersion admixtures known as such. According to the process, the polymer is first mixed with a plasticizer in order to obtain a plasticized polymer blend. The plasticized polymer blend is then mixed with dispersion admixtures and water at an elevated temperature so as to form a dispersion. The plasticizing of the polymer and the dispersion of the mixture in water can be performed in an extruder. The obtained dispersion is homogenized in order to improve its stability. The dispersion obtained by the invention can be used to coat paper or board, as a primer or a component in paint or labelling adhesives, and it is also suitable for the production of cast films and as a binder in materials based on cellulose fibers, as well as for coating medicinal preparations.

CLMN 6

L3 ANSWER 3 OF 25 IFIPAT COPYRIGHT 2008 IFI on STN

AN 10021724 IFIPAT;IFIUDB;IFICDB

TI PROCESS FOR THE PREPARATION OF POLYMER DISPERSIONS; HYDROPHOBIC; MIXTURE OF BIOPOLYMER, PLASTICIZER, ADJUVANTS AND WATER

INF Hamara; Jouni, Kerava, FI  
Heikkila; Maija Elina, Vantaa, FI  
Mikkonen; Hannu, Rajamaki, FI  
Peltonen; Soili, Rajamaki, FI

IN Hamara Jouni (FI); Heikkila Maija Elina (FI); Mikkonen Hannu (FI); Peltonen Soili (FI)

PAF Valtion teknillinen tutkimuskeskus

PA Valtion Teknillinen Tutkimuskeskus FI (5058)

AG BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747, US

PI US 2001021733 A1 20010913

AI US 2001-846202 20010502

RLI WO 1997-FI837 19971231 Section 371 PCT Filing UNKNOWN  
US 1999-331971 19990820 CONTINUATION ABANDONED

PRAI FI 1996-5305 19961231

FI US 2001021733 20010913

US 6780903 20040824

DT Utility; Patent Application - First Publication

FS CHEMICAL

APPLICATION

ED Entered STN: 16 Apr 2002

Last Updated on STN: 8 Jul 2002

CLMN 31

AB The invention relates to a new process for preparing polymer dispersions. According to the invention, a mixture is first formed of a polymer component, a plasticizer, dispersion auxiliaries and water, the mixture is then heated to approximately 20 to 100 degrees C. in order to form a pastelike composition, and the paste-like composition is dispersed in water. The dispersion obtained according to the invention can be used for coating paper or board, as a primer, as a component in adhesives, paint or lacquer, and it is also suited for the manufacture of cast films and for use as a binder in materials based on cellulosic fibers.

CLMN 31

L3 ANSWER 4 OF 25 IFIPAT COPYRIGHT 2008 IFI on STN

AN 03980002 IFIPAT;IFIUDB;IFICDB

TI HYDROPHOBIC POLYMER DISPERSION AND PROCESS

FOR THE PREPARATION THEREOF; STARCH ESTER DISPERSED IN A LIQUID  
PHASE TOGETHER WITH DISPERSION ADMIXTURES; ADHESIVE; COATING; BINDING  
AGENT

INF Haasmaa; Kristiina, Espoo, FI  
Heikkila; Maija Elina, Espoo, FI  
Paronen; Timo Petteri, Kuopio, FI  
Peltonen; Soili, Rajamaki, FI  
Urtti; Arto Olavi, Kuopio, FI  
Vuorenmaa; Jani, Rajamaki, FI  
IN Haasmaa Kristiina (FI); Heikkila Maija Elina (FI); Paronen Timo Petteri  
(FI); Peltonen Soili (FI); Urtti Arto Olavi (FI); Vuorenmaa Jani (FI)  
PAF Oy Polymer Corex Kuopio Ltd., Kuopio, FI  
PA Polymer Corex Kuopio Ltd Oy FI (43117)  
EXNAM Seidleck, James J  
EXNAM Rajguru, U K  
AG Birch, Stewart, Kolasch & Birch, LLP  
PI US 6656984 B1 20031202  
WO 9749762 19971231  
AI US 1999-202981 19990224  
WO 1997-FI410 19970625  
19990224 PCT 371 date  
19990224 PCT 102(e) date  
XPD 25 Jun 2017  
PRAI FI 1996-2627 19960625  
FI US 6656984 20031202  
DT Utility; Granted Patent - Utility, no Pre-Grant Publication  
FS CHEMICAL  
GRANTED  
ED Entered STN: 4 Dec 2003  
Last Updated on STN: 6 Jul 2004  
MRN 009784 MFN: 0223  
CLMN 35  
GI 1 Drawing Sheet(s), 1 Figure(s).  
AB The invention relates to a hydrophobic polymer  
dispersion and a solvent-free process for the preparation  
thereof. According to the invention, the dispersion contains  
starch ester together with dispersion admixtures known as such.  
According to the process, the polymer is first mixed with a  
plasticizer in order to obtain a plasticized polymer  
blend. The plasticized polymer blend is then mixed with  
dispersion admixtures and water at an elevated temperature so as to form  
a dispersion. The plasticizing of the polymer and the  
dispersion of the mixture in water can be performed in an extruder. The  
obtained dispersion is homogenized in order to improve its stability. The  
dispersion obtained by the invention can be used to coat paper or board,  
as a primer or a component in paint or labeling adhesives, and it is also  
suitable for the production of cast films and as a binder in materials  
based on cellulose fibers, as well as for coating medicinal preparations.  
CLMN 35  
GI 1 Drawing Sheet(s), 1 Figure(s).  
L3 ANSWER 5 OF 25 USPATFULL on STN  
AN 2008:36525 USPATFULL  
TI METHOD OF TREATING PAIN BY ADMINISTERING 24 HOUR ORAL OPIOID  
FORMULATIONS EXHIBITING RAPID RATE OF INITIAL RISE OF PLASMA DRUG LEVEL  
IN Sackler, Richard S., Greenwich, CT, UNITED STATES  
Goldenheim, Paul, Wilton, CT, UNITED STATES  
Kaiko, Robert F., Weston, CT, UNITED STATES  
PA PURDUE PHARMA L.P., Stamford, CT, UNITED STATES, 06901-3431 (U.S.  
corporation)  
PI US 2008031963 A1 20080207  
AI US 2007-760316 A1 20070608 (11)

RLI Continuation of Ser. No. US 2006-501661, filed on 8 Aug 2006, PENDING  
Continuation of Ser. No. US 2002-162132, filed on 4 Jun 2002, PENDING  
Continuation of Ser. No. US 1997-938898, filed on 26 Sep 1997, ABANDONED  
Continuation of Ser. No. US 1996-578688, filed on 22 Jul 1996, GRANTED,  
Pat. No. US 5672360 A 3/1 of International Ser. No. WO 1994-US13606,  
filed on 22 Nov 1994 Continuation-in-part of Ser. No. US 1993-156468,  
filed on 23 Nov 1993, GRANTED, Pat. No. US 5478577  
DT Utility  
FS APPLICATION  
LREP DARBY & DARBY P.C., P.O. BOX 770, Church Street Station, New York, NY,  
10008-0770, US  
CLMN Number of Claims: 28  
ECL Exemplary Claim: 1-26  
DRWN 14 Drawing Page(s)  
LN.CNT 1725

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Patients are treated with 24-hour oral sustained release opioid  
formulations which, upon administration, provide an initially rapid  
opioid absorption such that the minimum effective analgesic  
concentration of the opioid is more quickly achieved. These sustained  
release opioid formulations include an effective amount of at least one  
retardant material to cause said opioid analgesic to be released at a  
such a rate as to provide an analgesic effect after oral administration  
to a human patient for at least about 24 hours, and are characterized by  
providing an absorption half-life from 1 to about 8 hours. A method of  
titrating a human patient utilizing these sustained release opioid  
formulations is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 6 OF 25 USPTFULL on STN  
AN 2007:271607 USPTFULL  
TI METHOD OF TREATING PAIN BY ADMINISTERING 24 HOUR ORAL OPIOID  
FORMULATIONS EXHIBITING RAPID RATE OF INITIAL RISE OF PLASMA DRUG LEVEL  
IN Sackler, Richard S., Greenwich, CT, UNITED STATES  
Goldenheim, Paul, Wilton, CT, UNITED STATES  
Kaiko, Robert F., Weston, CT, UNITED STATES  
PA PURDUE PHARMA L.P., Stamford, CT, UNITED STATES, 06901-3431 (U.S.  
corporation)  
PI US 2007237833 A1 20071011  
AI US 2007-760393 A1 20070608 (11)  
RLI Continuation of Ser. No. US 2006-501661, filed on 8 Aug 2006, PENDING  
Continuation of Ser. No. US 2002-162132, filed on 4 Jun 2002, PENDING  
Continuation of Ser. No. US 1997-938898, filed on 26 Sep 1997, ABANDONED  
Continuation of Ser. No. US 1996-578688, filed on 22 Jul 1996, GRANTED,  
Pat. No. US 5672360 A 3/1 of International Ser. No. WO 1994-US13606,  
filed on 22 Nov 1994 Continuation-in-part of Ser. No. US 1993-156468,  
filed on 23 Nov 1993, GRANTED, Pat. No. US 5478577  
DT Utility  
FS APPLICATION  
LREP DARBY & DARBY P.C., P.O. BOX 770, Church Street Station, New York, NY,  
10008-0770, US  
CLMN Number of Claims: 28  
ECL Exemplary Claim: 1-26  
DRWN 14 Drawing Page(s)  
LN.CNT 1732

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Patients are treated with 24-hour oral sustained release opioid  
formulations which, upon administration, provide an initially rapid  
opioid absorption such that the minimum effective analgesic  
concentration of the opioid is more quickly achieved. These sustained  
release opioid formulations include an effective amount of at least one

retardant material to cause said opioid analgesic to be released at a such a rate as to provide an analgesic effect after oral administration to a human patient for at least about 24 hours, and are characterized by providing an absorption half-life from 1 to about 8 hours. A method of titrating a human patient utilizing these sustained release opioid formulations is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 7 OF 25 USPATFULL on SIN  
AN 2007:271606 USPATFULL  
TI METHOD OF TREATING PAIN BY ADMINISTERING 24 HOUR ORAL OPIOID  
FORMULATIONS EXHIBITING RAPID RATE OF INITIAL RISE OF PLASMA DRUG LEVEL  
IN Sackler, Richard S., Greenwich, CT, UNITED STATES  
Goldenheim, Paul, Wilton, CT, UNITED STATES  
Kaiko, Robert F., Weston, CT, UNITED STATES  
PA PURDUE PHARMA L.P., Stamford, CT, UNITED STATES, 06901-3431 (U.S.  
corporation)  
PI US 2007237832 A1 20071011  
AI US 2007-760349 A1 20070608 (11)  
RLI Continuation of Ser. No. US 2006-501661, filed on 8 Aug 2006, PENDING  
Continuation of Ser. No. US 2002-162132, filed on 4 Jun 2002, PENDING  
Continuation of Ser. No. US 1997-938898, filed on 26 Sep 1997, ABANDONED  
Continuation of Ser. No. US 1996-578688, filed on 22 Jul 1996, GRANTED,  
Pat. No. US 5672360 A 371 of International Ser. No. WO 1994-US13606,  
filed on 22 Nov 1994 Continuation-in-part of Ser. No. US 1993-156468,  
filed on 23 Nov 1993, GRANTED, Pat. No. US 5478577  
DT Utility  
FS APPLICATION  
LREP DARBY & DARBY P.C., P.O. BOX 770, Church Street Station, New York, NY,  
10008-0770, US  
CLMN Number of Claims: 28  
ECL Exemplary Claim: 1-26  
DRWN 14 Drawing Page(s)  
LN.CNT 1716

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Patients are treated with 24-hour oral sustained release opioid formulations which, upon administration, provide an initially rapid opioid absorption such that the minimum effective analgesic concentration of the opioid is more quickly achieved. These sustained release opioid formulations include an effective amount of at least one retardant material to cause said opioid analgesic to be released at a such a rate as to provide an analgesic effect after oral administration to a human patient for at least about 24 hours, and are characterized by providing an absorption half-life from 1 to about 8 hours. A method of titrating a human patient utilizing these sustained release opioid formulations is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 8 OF 25 USPATFULL on SIN  
AN 2006:314821 USPATFULL  
TI Method of treating pain by administering 24 hour oral opioid  
formulations exhibiting rapid rate of initial rise of plasma drug level  
IN Sackler, Richard S., Greenwich, CT, UNITED STATES  
Goldenheim, Paul, Wilton, CT, UNITED STATES  
Kaiko, Robert F., Weston, CT, UNITED STATES  
PA Purdue Pharma L.P. (U.S. corporation)  
PI US 2006269604 A1 20061130  
AI US 2006-501661 A1 20060808 (11)  
RLI Continuation of Ser. No. US 2002-162132, filed on 4 Jun 2002, PENDING  
Continuation of Ser. No. US 1997-938898, filed on 26 Sep 1997, ABANDONED



Continuation of Ser. No. US 1996-578688, filed on 22 Jul 1996, GRANTED, Pat. No. US 5672360 A 371 of International Ser. No. WO 1994-US13606, filed on 22 Nov 1994 Continuation-in-part of Ser. No. US 1993-156468, filed on 23 Nov 1993, GRANTED, Pat. No. US 5478577

DT Utility  
FS APPLICATION  
LREP DARBY & DARBY P.C., P. O. BOX 5257, NEW YORK, NY, 10150-5257, US  
CLMN Number of Claims: 23  
ECL Exemplary Claim: 1  
DRWN 14 Drawing Page(s)  
LN.CNT 1723

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Patients are treated with 24-hour oral sustained release opioid formulations which, upon administrations, provide an initially rapid opioid absorption such that the minimum effective analgesic concentration of the opioid is more quickly achieved. These sustained release opioid formulations include an effective amount of at least one retardant material to cause said opioid analgesic to be released at a such a rate as to provide an analgesic effect after oral administration to a human patient for at least about 24 hours, and are characterized by providing an absorption half-life from 1 to about 8 hours. A method of titrating a human patient utilizing these sustained release opioid formulations is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 9 OF 25 USPATFULL on STN  
AN 2006:247541 USPATFULL  
TI Photothermographic material  
IN Oyamada, Takayoshi, Kanagawa, JAPAN  
PA FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)  
PI US 2006210932 A1 20060921  
AI US 2006-371019 A1 20060309 (11)  
PRAI JP 2005-77694 20050317  
DT Utility  
FS APPLICATION  
LREP TAIYO CORPORATION, 401 HOLLAND LANE, #407, ALEXANDRIA, VA, 22314, US  
CLMN Number of Claims: 11  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 3915

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides a photothermographic material having at least a substrate, an image forming layer and a non-photosensitive outermost layer, in which the image forming layer and a non-photosensitive outermost layer are provided over a same side surface of the substrate. The image forming layer contains at least a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a binder. A non-photosensitive intermediate layer A resides between the image forming layer and the non-photosensitive outermost layer. 50% by mass or more of a binder comprised in the non-photosensitive intermediate layer A is a hydrophobic polymer. A glass transition temperature (Tg) of the hydrophobic polymer is 1 to 30° C. higher than a Tg of the binder comprised in the image forming layer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 10 OF 25 USPATFULL on STN  
AN 2006:233663 USPATFULL  
TI Photothermographic material  
IN Izumi, Yasuyuki, Kanagawa, JAPAN  
PA FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)

PI US 2006199117 A1 20060907  
 AI US 2006-366418 A1 20060303 (11)  
 PRAI JP 2005-62618 20050307  
 DT Utility  
 FS APPLICATION  
 LREP TAIYO CORPORATION, 401 HOLLAND LANE, #407, ALEXANDRIA, VA, 22314, US  
 CLMN Number of Claims: 19  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 4094

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides a photothermographic material having, on a surface of a substrate, an image forming layer and a non-photosensitive layer. The image forming layer has a photosensitive silver halide, a non-photosensitive organic silver salt, a reducing agent and a binder. At least one of the image forming layer and the non-photosensitive layer has at least one selected from the group consisting of: modified polyvinyl alcohol A, which is a polyvinyl alcohol including an  $\alpha$ -olefin having 1 to 4 carbon atoms as a copolymerized constituent thereof; modified polyvinyl alcohol B, which is a polyvinyl alcohol including, as a copolymerized constituent thereof, an ethylenic unsaturated carboxylic acid; and modified polyvinyl alcohol C, which is a polyvinyl alcohol including, as a copolymerized constituent thereof, an ethylenic unsaturated monomer having a primary amino group or a secondary amino group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 11 OF 25 USPATFULL on STN  
 AN 2006:175493 USPATFULL  
 TI Polymer solution and dispersion and a process or the preparation thereof  
 IN Mikkonen, Hannu, Rajamaki, FINLAND  
 Tarvainen, Maarit, Rauma, FINLAND  
 Peltonen, Soili, Rajamaki, FINLAND  
 Paronen, Timo Petteri, Kuopio, FINLAND  
 PA Valtioin Teknillinen Tutkimuskeskus, Espoo, FINLAND, FI-02150 (non-U.S. corporation)  
 PI US 2006148943 A1 20060706  
 AI US 2003-528993 A1 20030925 (10)  
 WO 2003-FI700 20030925  
 PRAI FI 2002-1730 20020927 PCT 371 date  
 DT Utility  
 FS APPLICATION  
 LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747, US  
 CLMN Number of Claims: 16  
 ECL Exemplary Claim: 1  
 DRWN 4 Drawing Page(s)  
 LN.CNT 1268

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A polymer dispersion or solution containing a hydrophobic polysaccharide, which is dispersed or dissolved in liquid phase, and plasticizer composition of the polysaccharide, whereby at least 10% by weight of the plasticizer composition is formed from alkenyl succinic anhydride. The invention also relates to the preparation of polymer dispersions and solutions and to the films and coatings produced from them. The dispersions according to the invention are stable, and coating with excellent film-forming properties can be prepared from them.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 12 OF 25 USPATFULL on STN  
 AN 2006:167932 USPATFULL  
 TI Multi-purpose adhesive composition  
 IN Soerens, Dave Allen, Neenah, WI, UNITED STATES  
 Campbell, Stephen Michael, Winneconne, WI, UNITED STATES  
 Shen, Jisheng, Appleton, WI, UNITED STATES  
 Koenig, David William, Menasha, WI, UNITED STATES  
 PI US 2006142445 A1 20060629  
 AI US 2004-25317 A1 20041229 (11)  
 DT Utility  
 FS APPLICATION  
 LREP KIMBERLY-CLARK WORLDWIDE, INC., 401 NORTH LAKE STREET, NEENAH, WI,  
 54956, US  
 CLMN Number of Claims: 27  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 833  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB An adhesive composition comprises at least a binder polymer and a water-soluble plasticizer. The binder polymer may be present in a range of about 10% to about 60% by weight of the adhesive composition, and the plasticizer may be present in the range of about 5% to about 85% by weight of the adhesive composition, such as in the range of about 40% to about 80% by weight. In some aspects, the adhesive also comprises less than 10% by weight highly-volatile component, such as about 0% to about 5% by weight. The adhesive composition can be utilized in a variety of articles, including personal care articles, health/medical articles, and household/industrial articles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 13 OF 25 USPATFULL on STN  
 AN 2006:80348 USPATFULL  
 TI Photothermographic material  
 IN Inoue, Rikio, Kanagawa, JAPAN  
 PA FUJI PHOTO FILM CO., LTD. (non-U.S. corporation)  
 PI US 2006068341 A1 20060330  
 US 7226728 B2 20070605  
 AI US 2005-223178 A1 20050912 (11)  
 PRAI JP 2004-277858 20040924  
 DT Utility  
 FS APPLICATION  
 LREP TAIYO CORPORATION, 401 HOLLAND LANE, #407, ALEXANDRIA, VA, 22314, US  
 CLMN Number of Claims: 19  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 4638  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The present invention provides a photothermographic material having: a support and an image-forming layer including a photosensitive silver halide, a non-photosensitive organic silver salt, a reducer, and a binder on at least one surface of the support, wherein the photothermographic material further contains a dye having a half breadth of 100 nm or less at a maximum absorbance peak, and 50 mass % or more of a binder in an outermost layer on a dye-containing surface is a polymer latex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 14 OF 25 USPATFULL on STN  
 AN 2003:314656 USPATFULL

TI Hydrophobic polymer dispersion and process  
 for the preparation thereof  
 IN Haasmaa, Kristiina, Espoo, FINLAND  
 Paronen, Timo Petteri, Kuopio, FINLAND  
 Urtti, Arto Olavi, Kuopio, FINLAND  
 Peltonen, Soili, Rajamaki, FINLAND  
 Heikkila, Maija Elina, Espoo, FINLAND  
 Vuorenmaa, Jani, Rajamaki, FINLAND  
 PA Oy Polymer Corex Kuopio Ltd., Kuopio, FINLAND (non-U.S. corporation)  
 PI US 6656984 B1 20031202  
 WO 9749762 19971231  
 AI US 1999-202981 19990224 (9)  
 WO 1997-FI410 19970625  
 PRAI FI 1996-2627 19960625  
 DT Utility  
 FS GRANTED  
 EXNAM Primary Examiner: Seidleck, James J.; Assistant Examiner: Rajguru, U. K.  
 LREP Birch, Stewart, Kolasch & Birch, LLP  
 CLMN Number of Claims: 35  
 ECL Exemplary Claim: 1  
 DRWN 1 Drawing Figure(s); 1 Drawing Page(s)  
 LN.CNT 954  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB The invention relates to a hydrophobic polymer  
 dispersion and a solvent-free process for the preparation  
 thereof. According to the invention, the dispersion contains  
 starch ester together with dispersion admixtures known as such.  
 According to the process, the polymer is first mixed with a  
 plasticizer in order to obtain a plasticized polymer  
 blend. The plasticized polymer blend is then mixed with  
 dispersion admixtures and water at an elevated temperature so as to form  
 a dispersion. The plasticizing of the polymer and the  
 dispersion of the mixture in water can be performed in an extruder. The  
 obtained dispersion is homogenized in order to improve its stability.  
 The dispersion obtained by the invention can be used to coat paper or  
 board, as a primer or a component in paint or labeling adhesives, and it  
 is also suitable for the production of cast films and as a binder in  
 materials based on cellulose fibers, as well as for coating medicinal  
 preparations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 15 OF 25 USPATFULL on STN  
 AN 2003:50881 USPATFULL  
 TI Method of treating pain by administering 24 hour oral opioid  
 formulations exhibiting rapid rate of initial rise of plasma drug level  
 IN Sackler, Richard S., Greenwich, CT, UNITED STATES  
 Goldenheim, Paul, Wilton, CT, UNITED STATES  
 Kaiko, Robert F., Weston, CT, UNITED STATES  
 PI US 2003035837 A1 20030220  
 AI US 2002-162132 A1 20020604 (10)  
 RLI Continuation of Ser. No. US 1997-938898, filed on 26 Sep 1997, ABANDONED  
 Continuation of Ser. No. US 1996-578688, filed on 22 Jul 1996, GRANTED,  
 Pat. No. US 5672360 A 371 of International Ser. No. WO 1994-US13606,  
 filed on 22 Nov 1994, PENDING Continuation-in-part of Ser. No. US  
 1993-156468, filed on 23 Nov 1993, GRANTED, Pat. No. US 5478577  
 DT Utility  
 FS APPLICATION  
 LREP DAVIDSON, DAVIDSON & KAPPEL, LLC, 485 SEVENTH AVENUE, 14TH FLOOR, NEW  
 YORK, NY, 10018  
 CLMN Number of Claims: 26  
 ECL Exemplary Claim: 1

DRWN 14 Drawing Page(s)

LN.CNT 1789

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Patients are treated with 24-hour oral sustained release opioid formulations which, upon administration, provide an initially rapid opioid absorption such that the minimum effective analgesic concentration of the opioid is more quickly achieved. These sustained release opioid formulations include an effective amount of at least one retardant material to cause said opioid analgesic to be released at a such a rate as to provide an analgesic effect after oral administration to a human patient for at least about 24 hours, and are characterized by providing an absorption half-life from 1 to about 8 hours. A method of titrating a human patient utilizing these sustained release opioid formulations is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 16 OF 25 USPATFULL on STN

AN 2002:268457 USPATFULL

TI Precision polymer dispersion application by airless spray

IN Scott, Paul, Epsom, UNITED KINGDOM

Sol, Andre, Maastricht, NETHERLANDS

PA National Starch and Chemical Investment Holding Corporation, New Castle, DE, United States (U.S. corporation)

PI US 6465047 B1 20021015

AI US 2001-942888 20010830 (9)

DT Utility

FS GRANTED

EXNAM Primary Examiner: Cameron, Erma

LREP Roland, Esq., Thomas F.

CLMN Number of Claims: 10

ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 342

AB The present invention is directed to a method for applying an aqueous polymer dispersion to a substrate involving forming a viscosity of from 10 to 5,000 m.multidot.Pas, and applying the dispersion to a substrate at a pressure of from 100 to 1500 psi. The method is useful with porous substrates, and especially in non-woven materials. The process provides a precise means of coating a polymer dispersion on the surface of a substrate, or with controlled penetration into the substrate.

L3 ANSWER 17 OF 25 USPATFULL on STN

AN 2002:112317 USPATFULL

TI TREATING PAIN BY ADMINISTERING 24 HOURS OPIOID FORMULATIONS EXHIBITING RAPID RISE OF DRUG LEVEL

IN SACKLER, RICHARD S., GREENWICH, CT, UNITED STATES

GOLDENHEIM, PAUL, WILTON, CT, UNITED STATES

KAIKO, ROBERT F., WESTON, CT, UNITED STATES

PI US 2002058050 A1 20020516

AI US 1997-938898 A1 19970926 (8)

RLI Continuation of Ser. No. US 1996-578688, filed on 22 Jul 1996, GRANTED, Pat. No. US 5672360 A 371 of International Ser. No. WO 1994-US13606, filed on 22 Nov 1994, UNKNOWN

PRAI US 94- 19941122

DT Utility

FS APPLICATION

LREP DAVIDSON, DAVIDSON & KAPPEL, LLC, 485 SEVENTH AVENUE, 14TH FLOOR, NEW YORK, NY, 10018

CLMN Number of Claims: 26

ECL Exemplary Claim: 1

DRWN 14 Drawing Page(s)

LN.CNT 1786

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Patients are treated with 24-hour oral sustained release opioid formulations which, upon administration, provide an initially rapid opioid absorption such that the minimum effective analgesic concentration of the opioid is more quickly achieved. These sustained release opioid formulations include an effective amount of at least one retardant material to cause said opioid analgesic to be released at a such a rate as to provide an analgesic effect after oral administration to a human patient for at least about 24 hours, and are characterized by providing an absorption half-life from 1 to about 8 hours. A method of titrating a human patient utilizing these sustained release opioid formulations is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 18 OF 25 USPATFULL on STN

AN 2002:55091 USPATFULL

TI Hydrophobic polymer dispersion and process  
for the preparation thereof

IN Haasmaa, Kristiina, Espoo, FINLAND  
Paronen, Timo Petteri, Kuopio, FINLAND  
Urtti, Arto Olavi, Kuopio, FINLAND  
Peltonen, Soili, Rajamaki, FINLAND  
Heikkila, Maija Elina, Espoo, FINLAND  
Vuorenmaa, Jani, Rajamaki, FINLAND

PA Oy Polymer Corex Kuopio Ltd. (non-U.S. corporation)

PI US 2002032254 A1 20020314

AI US 2001-970952 A1 20011005 (9)

RLI Division of Ser. No. US 1999-202981, filed on 24 Feb 1999, PENDING A 371  
of International Ser. No. WO 1997-FI410, filed on 25 Jun 1997, UNKNOWN

PRAI FI 1996-2627 19960625

DT Utility

FS APPLICATION

LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747

CLMN Number of Claims: 6

ECL Exemplary Claim: 1

DRWN 1 Drawing Page(s)

LN.CNT 866

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a hydrophobic polymer dispersion and a solvent-free process for the preparation thereof. According to the invention, the dispersion contains starch ester together with dispersion admixtures known as such. According to the process, the polymer is first mixed with a plasticizer in order to obtain a plasticized polymer blend. The plasticized polymer blend is then mixed with dispersion admixtures and water at an elevated temperature so as to form a dispersion. The plasticizing of the polymer and the dispersion of the mixture in water can be performed in an extruder. The obtained dispersion is homogenized in order to improve its stability. The dispersion obtained by the invention can be used to coat paper or board, as a primer or a component in paint or labelling adhesives, and it is also suitable for the production of cast films and as a binder in materials based on cellulose fibers, as well as for coating medicinal preparations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 19 OF 25 USPATFULL on STN

AN 2001:155799 USPATFULL

TI Process for the preparation of polymer dispersions  
 IN Peltonen, Soili, Rajamaki, Finland  
 Heikkila, Maija Elina, Vantaa, Finland  
 Mikkonen, Hannu, Rajamaki, Finland  
 Hamara, Jouni, Kerava, Finland  
 PA Valtion teknillinen tutkimuskeskus (non-U.S. corporation)  
 PI US 2001021733 A1 20010913  
 US 6780903 B2 20040824  
 AI US 2001-846202 A1 20010502 (9)  
 RLI Continuation of Ser. No. US 1999-331971, filed on 20 Aug 1999, ABANDONED  
 A 371 of International Ser. No. WO 1997-FI837, filed on 31 Dec 1997,  
 UNKNOWN  
 PRAI FI 1996-5305 19961231  
 DT Utility  
 FS APPLICATION  
 LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747  
 CLMN Number of Claims: 31  
 ECL Exemplary Claim: 1  
 DRWN No Drawings  
 LN.CNT 786

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a new process for preparing polymer  
 dispersions. According to the invention, a mixture is first formed of a  
 polymer component, a plasticizer, dispersion auxiliaries and  
 water, the mixture is then heated to approximately 20 to 100° C.  
 in order to form a paste-like composition, and the paste-like  
 composition is dispersed in water. The dispersion obtained according to  
 the invention can be used for coating paper or board, as a primer, as a  
 component in adhesives, paint or lacquer, and it is also suited for the  
 manufacture of cast films and for use as a binder in materials based on  
 cellulosic fibers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 20 OF 25 USPATFULL ON STN  
 AN 97:88748 USPATFULL  
 TI Method of treating pain by administering 24 hour oral opioid  
 formulations  
 IN Sackler, Richard S., Greenwich, CT, United States  
 Kaiko, Robert F., Weston, CT, United States  
 Goldenheim, Paul, Wilton, CT, United States  
 PA Purdue Pharma, L.P., Norwalk, CT, United States (U.S. corporation)  
 PI US 5672360 19970930  
 WO 9514460 19950601  
 AI US 1996-578688 19960722 (8)  
 WO 1994-US13606 19941122  
 19960722 PCT 371 date  
 19960722 PCT 102(e) date  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Page, Thurman K.; Assistant Examiner: Benston, Jr.,  
 William E.  
 LREP Steinberg, Raskin & Davidson, P.C.  
 CLMN Number of Claims: 14  
 ECL Exemplary Claim: 1  
 DRWN 14 Drawing Figure(s); 14 Drawing Page(s)  
 LN.CNT 1813

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Patients are treated with 24-hour oral sustained release opioid  
 formulations which, upon administration, provide an initially rapid  
 opioid absorption such that the minimum effective analgesic  
 concentration of the opioid is more quickly achieved. These sustained

release opioid formulations include an effective amount of at least one retardant material to cause said opioid analgesic to be released at a such a rate as to provide an analgesic effect after oral administration to a human patient for at least about 24 hours, and are characterized by providing an absorption half-life from 1 to about 8 hours. A method of titrating a human patient utilizing these sustained release opioid formulations is also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 21 OF 25 USPAT2 on STN  
AN 2006:80348 USPAT2  
TI Photothermographic material  
IN Inoue, Rikio, Kanagawa, JAPAN  
PA Fujifilm Corporation, Tokyo, JAPAN (non-U.S. corporation)  
PI US 7226728 B2 20070605  
AI US 2005-223178 20050912 (11)  
PRAI JP 2004-277858 20040924  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Visconti, Geraldina  
LREP Burke, Margaret A., Moss, Sheldon J.  
CLMN Number of Claims: 27  
ECL Exemplary Claim: 1  
DRWN No Drawings  
LN.CNT 4701

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides a photothermographic material having: a support and an image-forming layer including a photosensitive silver halide, a non-photosensitive organic silver salt, a reducer, and a binder on at least one surface of the support, wherein the photothermographic material further contains a dye having a half breadth of 100 nm or less at a maximum absorbance peak, and 50 mass % or more of a binder in an outermost layer on a dye-containing surface is a polymer latex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 22 OF 25 USPAT2 on STN  
AN 2001:155799 USPAT2  
TI Process for the preparation of polymer dispersions  
IN Peltonen, Soili, Rajamaki, FINLAND  
Heikkila, Maija Elina, Vantaa, FINLAND  
Mikkonen, Hannu, Rajamaki, FINLAND  
Hamara, Jouni, Kerava, FINLAND  
PA Valtion Teknillinen Tutkimuskeskus, Espoo, FINLAND (non-U.S. corporation)  
PI US 6780903 B2 20040824  
AI US 2001-846202 20010502 (9)  
RLI Continuation of Ser. No. US 331971  
PRAI FI 1996-5305 19961231  
DT Utility  
FS GRANTED  
EXNAM Primary Examiner: Acquah, Samuel A.; Assistant Examiner: Rajguru, U. K  
LREP Birch, Stewart, Kolasch & Birch, LLP  
CLMN Number of Claims: 34  
ECL Exemplary Claim: 1  
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)  
LN.CNT 709

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to a new process for preparing polymer dispersions. According to the invention, a mixture is first formed of a



polymer component, a plasticizer, dispersion auxiliaries and water, the mixture is then heated to approximately 20 to 100° C. in order to form a paste-like composition, and the paste-like composition is dispersed in water. The dispersion obtained according to the invention can be used for coating paper or board, as a primer, as a component in adhesives, paint or lacquer, and it is also suited for the manufacture of cast films and for use as a binder in materials based on cellulosic fibers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L3 ANSWER 23 OF 25 WPINDEX COPYRIGHT 2008 THE THOMSON CORP on STN  
 AN 1998-388070 [33] WPINDEX  
 DNC C1998-117476 [33]  
 TI Preparation of a hydrophobic polymer  
 dispersion useful as a coating, adhesive for casting films or as a  
 binder - comprises biodegradable components including bio:polymer,  
 plasticiser, dispersant and water  
 DC A82; E19; F09; G02  
 IN HAMARA J; HEIKKILA M E; HEIKKILAE M E; MIKKONEN H; PELTONEN S; HEIKKILAE E  
 PA (VALW-C) VALTION TEKNILLINEN TUTKIMUSKESKUS  
 CYC 80  
 PIA WO 9829477 A1 19980709 (199833)\* EN 24[0]  
 FI 9605305 A 19980701 (199840) FI  
 AU 9853242 A 19980731 (199849) EN  
 EP 950074 A1 19991020 (199948) EN  
 FI 105566 B1 20000915 (200054) FI  
 US 20010021733 A1 20010913 (200155) EN  
 US 6780903 B2 20040824 (200457) EN  
 EP 950074 B1 20051102 (200574) EN  
 DE 69734527 E 20051208 (200581) DE  
 DE 69734527 T2 20060810 (200654) DE  
 ADT WO 9829477 A1 WO 1997-FI837 19971231; FI 9605305 A FI 1996-5305 19961231;  
 FI 105566 B1 FI 1996-5305 19961231; DE 69734527 E DE 1997-634527 19971231;  
 EP 950074 A1 EP 1997-950215 19971231; EP 950074 B1 EP 1997-950215  
 19971231; DE 69734527 E EP 1997-950215 19971231; EP 950074 A1 WO  
 1997-FI837 19971231; US 20010021733 A1 Cont of WO 1997-FI837 19971231; US  
 6780903 B2 Cont of WO 1997-FI837 19971231; EP 950074 B1 WO 1997-FI837  
 19971231; DE 69734527 E WO 1997-FI837 19971231; AU 9853242 A AU 1998-53242  
 19971231; US 20010021733 A1 Cont of US 1999-331971 19990820; US 6780903 B2  
 Cont of US 1999-331971 19990820; US 20010021733 A1 US 2001-846202  
 20010502; US 6780903 B2 US 2001-846202 20010502; DE 69734527 T2 DE  
 1997-634527 19971231; DE 69734527 T2 EP 1997-950215 19971231; DE 69734527  
 T2 WO 1997-FI837 19971231  
 FDT DE 69734527 E Based on EP 950074 A; FI 105566 B1 Previous  
 Publ FI 9605305 A; AU 9853242 A Based on WO 9829477 A; EP  
 950074 A1 Based on WO 9829477 A; EP 950074 B1 Based on WO  
 9829477 A; DE 69734527 E Based on WO 9829477 A; DE 69734527  
 T2 Based on EP 950074 A; DE 69734527 T2 Based on WO 9829477  
 A  
 PRAI FI 1996-5305 19961231  
 AN 1998-388070 [33] WPINDEX  
 AB WO 1998029477 A1 UPAB: 20060201  
 Preparation of a hydrophobic polymer  
 dispersion comprises: (a) forming a mixture of biopolymer,  
 plasticiser, dispersion auxiliary agents and water; (b) heating  
 the mixture to obtain a paste-like composition; and (c) diluting the  
 paste-like composition in water.

USE - Used for coating board or paper, as a primer or adhesive  
 component in water-based adhesives, in paints, as a lacquer for coating  
 wood, for cast films and as a binder in materials based on cellulosic  
 fibres.

ADVANTAGE - Most or all of the components are biodegradable.

Member(0004)

ABEQ EP 950074 A1 UPAB 20060201

Preparation of a hydrophobic polymer dispersion comprises: (a) forming a mixture of biopolymer, plasticiser, dispersion auxiliary agents and water; (b) heating the mixture to obtain a paste-like composition; and (c) diluting the paste-like composition in water.

USE - Used for coating board or paper, as a primer or adhesive component in water-based adhesives, in paints, as a lacquer for coating wood, for cast films and as a binder in materials based on cellulosic fibres.

ADVANTAGE - Most or all of the components are biodegradable.

L3 ANSWER 24 OF 25 WPINDEX COPYRIGHT 2008 THE THOMSON CORP on STN

AN 1998-110177 [10] WPINDEX

DNC C1998-036144 [10]

TI Hydrophobic polymer dispersion containing modified starch - used as a coating for pharmaceutical tablets, a component in labelling adhesives or paint, to prepare cast films or as a binding agent in materials based on cellulose fibres

DC A11; A23; A81; A82; A96; B07; E19; G02; G03

IN HAASMAA K; HEIKKILA M E; HEIKKILAE E; HEIKKILAE M E; PARONEN P; PARONEN T

P; PELTONEN S; URTTI A O; URTTI O; VUORENPAA J; VUORENPAAE J

PA (POLY-N) POLYMER COREX KUOPIO LTD OY

CYC 76

PIA WO 9749762 A1 19971231 (199810)\* EN 38[1]

FI 9602627 A 19971226 (199812) FI

AU 9732642 A 19980114 (199822) EN

EP 907681 A1 19990414 (199919) EN

FI 108038 B1 20011115 (200176) FI

US 20020032254 A1 20020314 (200222) EN

US 6656984 B1 20031202 (200379) EN

EP 907681 B1 20040428 (200429) EN

DE 69728875 E 20040603 (200436) DE

ES 2221053 T3 20041216 (200506) ES

DE 69728875 T2 20050609 (200538) DE

ADT WO 9749762 A1 WO 1997-FI410 19970625; FI 9602627 A FI 1996-2627 19960625; FI 108038 B1 FI 1996-2627 19960625; AU 9732642 A AU 1997-32642 19970625; DE 69728875 E DE 1997-69728875 19970625; DE 69728875 T2 DE 1997-69728875 19970625; EP 907681 A1 EP 1997-928289 19970625; EP 907681 B1 EP 1997-928289 19970625; DE 69728875 E EP 1997-928289 19970625; ES 2221053 T3 EP 1997-928289 19970625; DE 69728875 T2 EP 1997-928289 19970625; EP 907681 A1 WO 1997-FI410 19970625; US 20020032254 A1 Div Ex WO 1997-FI410 19970625; US 6656984 B1 WO 1997-FI410 19970625; EP 907681 B1 WO 1997-FI410 19970625; DE 69728875 E WO 1997-FI410 19970625; DE 69728875 T2 WO 1997-FI410 19970625; US 20020032254 A1 Div Ex US 1999-202981 19990224; US 6656984 B1 US 1999-202981 19990224; US 20020032254 A1 US 2001-970952 20011005

FDT DE 69728875 E Based on EP 907681 A; ES 2221053 T3 Based on EP 907681 A; DE 69728875 T2 Based on EP 907681 A; FI 108038 B1 Previous Publ FI 9602627 A; AU 9732642 A Based on WO 9749762 A; EP 907681 A1 Based on WO 9749762 A; US 6656984 B1 Based on WO 9749762 A; EP 907681 B1 Based on WO 9749762 A; DE 69728875 E Based on WO 9749762 A; DE 69728875 T2 Based on WO 9749762 A

PRAI FI 1996-2627 19960625

AN 1998-110177 [10] WPINDEX

AB WO 1997049762 A1 UPAB: 20060114

A hydrophobic polymer dispersion contains modified starch (in the form of a starch ester) in a liquid phase with dispersion admixtures. The polymer dispersion is obtained by dispersing the polymer in water using admixtures known per se,

whereby the polymer is biodegradable and is first mixed with a plasticiser in order to obtain a plasticised polymer blend, the blend is mixed (order optional), at elevated temperature, with dispersion admixtures and water, and the dispersion is optionally homogenised. Also claimed is the formation of a hydrophobic polymer dispersion where the polymer mixture is dispersed in water using admixtures known per se, a biodegradable polymer. The polymer is mixed with a plasticiser. This mixture is mixed with dispersion admixtures and water at an elevated temperature, then the dispersion is optionally homogenised.

USE - The polymer dispersion is used to coat paper or board, or as a primer or a component in labelling adhesives or paint. It is also used to manufacture cast films or as a binding agent in materials based on cellulose fibres or to coat medicinal preparations.

ADVANTAGE - The components are biodegradable and no solvents requiring removal by evaporation are required for the preparation.

Member(0004)

ABEQ EP 907681 A1 UPAB 20060114

A hydrophobic polymer dispersion contains modified starch (in the form of a starch ester) in a liquid phase with dispersion admixtures. The polymer dispersion is obtained by dispersing the polymer in water using admixtures known per se, whereby the polymer is biodegradable and is first mixed with a plasticiser in order to obtain a plasticised polymer blend, the blend is mixed (order optional), at elevated temperature, with dispersion admixtures and water, and the dispersion is optionally homogenised. Also claimed is the formation of a hydrophobic polymer dispersion where the polymer mixture is dispersed in water using admixtures known per se, a biodegradable polymer. The polymer is mixed with a plasticiser. This mixture is mixed with dispersion admixtures and water at an elevated temperature, then the dispersion is optionally homogenised.

USE - The polymer dispersion is used to coat paper or board, or as a primer or a component in labelling adhesives or paint. It is also used to manufacture cast films or as a binding agent in materials based on cellulose fibres or to coat medicinal preparations.

ADVANTAGE - The components are biodegradable and no solvents requiring removal by evaporation are required for the preparation.

L3 ANSWER 25 OF 25 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on  
STN  
AN 2004:44951 BIOSIS  
DN PREV200400046404  
TI Hydrophobic polymer dispersion and process  
for the preparation thereof.  
AU Haasmaa, Kristiina [Inventor, Reprint Author]; Paronen, Timo Petteri  
[Inventor]; Urtti, Arto Olavi [Inventor]; Peltonen, Soili [Inventor];  
Heikkilä, Maija Elina [Inventor]; Vuorenmaa, Jani [Inventor]  
CS Espoo, Finland  
ASSIGNEE: Oy Polymer Corex Kuopio Ltd., Kuopio, Finland  
PI US 6656984 20031202  
SO Official Gazette of the United States Patent and Trademark Office Patents,  
(Dec 2 2003) Vol. 1277, No. 1. <http://www.uspto.gov/web/menu/patdata.html>.  
e-file.  
ISSN: 0098-1133 (ISSN print).  
DT Patent  
LA English  
ED Entered STN: 14 Jan 2004  
Last Updated on STN: 14 Jan 2004  
AB The invention relates to a hydrophobic polymer  
dispersion and a solvent-free process for the preparation thereof.

According to the invention, the dispersion contains starch ester together with dispersion admixtures known as such. According to the process, the polymer is first mixed with a plasticizer in order to obtain a plasticized polymer blend. The plasticized polymer blend is then mixed with dispersion admixtures and water at an elevated temperature so as to form a dispersion. The plasticizing of the polymer and the dispersion of the mixture in water can be performed in an extruder. The obtained dispersion is homogenized in order to improve its stability. The dispersion obtained by the invention can be used to coat paper or board, as a primer or a component in paint or labeling adhesives, and it is also suitable for the production of cast films and as a binder in materials based on cellulose fibers, as well as for coating medicinal preparations.

=> file caplus		
COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	128.31	128.52

FILE 'CAPLUS' ENTERED AT 11:09:45 ON 13 MAR 2008  
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
 COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 13 Mar 2008 VOL 148 ISS 11  
 FILE LAST UPDATED: 12 Mar 2008 (20080312/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

<http://www.cas.org/infopolicy.html>

=> s Mikkonen Hannu/AU  
 L4 28 MIKKONEN HANNU/AU

=> s l4 and plastic?  
 686851 PLASTIC?  
 L5 5 L4 AND PLASTIC?

=> dis 15 1-5 bib abs

L5 ANSWER 1 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:589260 CAPLUS  
 DN 143:117044  
 TI Process for producing fiber composites  
 IN Buchert, Johanna; Groenqvist, Stina; Mikkonen, Hannu; Oksanen, Tarja; Pelttonen, Soili; Suurnaekki, Anna; Viikari, Liisa  
 PA Valtion Teknillinen Tutkimuskeskus, Finland  
 SO PCT Int. Appl., 24 pp.  
 CODEN: PIXXD2

DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005061791	A1	20050707	WO 2004-FI794	20041223
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	FI 2003001902	A	20050624	FI 2003-1902	20031223
	CA 2549525	A1	20050707	CA 2004-2549525	20041223
	EP 1697586	A1	20060906	EP 2004-805189	20041223
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
	BR 2004018090	A	20070417	BR 2004-18090	20041223
	US 2007164468	A1	20070719	US 2006-583339	20061002
PRAI	FI 2003-1902	A	20031223		
	WO 2004-FI794	W	20041223		

AB The invention provides a novel way of producing biodegradable composites comprising a hydrophobic polymer material and a reinforcing component of fibers derived from plant materials. Composite material produced by means of the present invention has improved strength properties and enhanced adhesion between the bifunctional fiber and the natural or synthetic polymer. A process for producing a composite comprising a lignocellulosic fibrous matrix, having phenolic groups, and a hydrophobic polymer, comprises the steps of (a) oxidizing the phenolic groups or the groups having a similar structure to provide an oxidized fiber material, (b) contacting the oxidized fiber material with a modifying agent containing at least one first functional portion, which is compatible with the oxidized fiber material, and at least one second hydrophobic portion, which is compatible with the hydrophobic polymer, to provide a lignocellulosic fiber material having a modified surface, and (c) contacting the fiber material with the hydrophobic polymer under conditions allowing for intimate contact between the modified fiber and the polymer to form a composite.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:300511 CAPLUS  
DN 142:356961  
TI Starch derivative pigment and filler and a method of manufacturing it  
IN Peltonen, Soili; Mikkonen, Hannu; Quintus-Leino, Pia; Varjos, Petri; Kataja, Kirsi  
PA Valtion Teknillinen Tutkimuskeskus, Finland  
SO PCT Int. Appl., 49 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005030844	A1	20050407	WO 2004-FI575	20041001
	WO 2005030844	A9	20060511		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

FI 2004000741	A	20050403	FI 2004-741	20040531
FI 118179	B1	20070815		
EP 1685185	A1	20060802	EP 2004-767089	20041001
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK				
CN 1863847	A	20061115	CN 2004-80028790	20041001
JP 2007507572	T	20070329	JP 2006-530313	20041001
US 2007101904	A1	20070510	US 2006-573041	20061222
PRAI FI 2003-5173	A	20031002		
FI 2004-741	A	20040531		
WO 2004-FI575	W	20041001		

AB The invention relates to a light, biodegradable, organic pigment and filler, and a method of manufacturing it. According to the invention, a solution comprising a starch derivative is first prepared by dissolving the starch derivative into a suitable solvent, and, after that, the solution is brought into contact with a non-solvent to precipitate the starch derivative from the solvent, and, as a result, a dispersion is obtained, one which comprises a precipitate consisting of starch derivative and a liquid phase formed of the solvent and the non-solvent, after which the solvent is removed from the liquid phase and the precipitate is separated from the non-solvent and recovered. The invention can be used to manufacture both a product comprising 100-300 nm spherical particles, which is suitable for use as a pigment, and a coral-like, porous product which is particularly suitable as a filler. The particles are useful in paper, cardboard, paints, plastics, rubbers, cosmetics, hygienic products, and detergents.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:292041 CAPLUS  
DN 140:305612  
TI Polymer solution and dispersion and a process for the preparation thereof  
Mikkonen, Hannu; Tarvainen, Maarit; Peltonen, Soili; Paronen, Timo Petteri  
PA Valtion Teknillinen Tutkimuskeskus, Finland  
SO PCT Int. Appl., 41 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004029097	A1	20040408	WO 2003-FI700	20030925
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,				

PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
 TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW  
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
 BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
 FI 2002001730 A 20040328 FI 2002-1730 20020927  
 FI 113874 B1 20040630  
 CA 2500126 A1 20040408 CA 2003-2500126 20030925  
 AU 2003266424 A1 20040419 AU 2003-266424 20030925  
 EP 1546207 A1 20050629 EP 2003-798208 20030925  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK  
 US 2006148943 A1 20060706 US 2006-528993 20060111  
 PRAI FI 2002-1730 A 20020927  
 WO 2003-FI700 W 20030925  
 AB The invention relates to a polymer dispersion or solution containing a hydrophobic polysaccharide (cellulose or starch derivative), which is dispersed or dissolved in liquid phase, and plasticizer composition of the polysaccharide, whereby at least 10% by weight of the plasticizer composition is formed from alkenylsuccinic anhydride. The invention also relates to the preparation of polymer dispersions and solns. and to the films and coatings produced from them. The dispersions according to the invention are stable, and coating with excellent film-forming properties can be prepared from them.

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2003:598185 CAPLUS  
 DN 140:205001  
 TI Enhanced film-forming properties for ethyl cellulose and starch acetate using n-alkenyl succinic anhydrides as novel plasticizers  
 AU Tarvainen, Maarit; Sutinen, Riitta; Peltonen, Solli; Mikkonen, Hannu; Maunus, Jaana; Vaha-Heikkila, Kalle; Lehto, Vesa-Pekka; Paronen, Petteri  
 CS Department of Pharmaceutics, University of Kuopio, Kuopio, FIN-70211, Finland  
 SO European Journal of Pharmaceutical Sciences (2003), 19(5), 363-371  
 CODEN: EPSCED; ISSN: 0928-0987  
 PB Elsevier B.V.  
 DT Journal  
 LA English  
 AB The aim of this study was to investigate the ability of n-alkenyl succinic anhydrides (n-ASAs) to improve the film-forming characteristics of a novel coating polymer, potato starch acetate degree of substitution 2.8 (SA). N-ASAs were also applied to improve the otherwise brittle properties of Et cellulose (EC) aqueous dispersion (Aquacoat) and EC solvent-based films. The effectiveness of two n-ASAs, 2-octenyl succinic anhydride (OSA) and 2-dodecene-1-yl succinic anhydride were evaluated as plasticizers. Mech. properties, both water vapor and drug permeabilities, and glass transition temps. of the cast free films were measured. Tri-Et citrate and di-Bu sebacate were used as reference plasticizers. The long hydrocarbon chain of n-ASA, with its accessible carbonyl groups, enabled a strong plasticization effect on the tested polymers. Due to the excellent mech. properties (i.e., a tough film structure with considerable flexibility) and low permeability of the plasticized films, n-ASAs, and especially OSA proved to be an ideal plasticizer particularly for EC based coatings. Also, the EC aqueous dispersion plasticized with n-ASAs resulted in a markedly enhanced coalescence of the colloidal polymer particles, even at low drying temps. In applications where a coating with high flexibility is required, n-ASAs can be used as plasticizers at moderately high concns. (up to 60-70%, weight/weight) without losing the high tensile strength, excellent

toughness and low permeability of EC and SA films.  
 RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1998:485114 CAPLUS  
 DN 129:136909  
 TI Preparation of biodegradable polymer dispersions and their use  
 IN Peltonen, Soili; Heikkilä, Maija Elina; Mikkonen, Hannu; Hamara,  
 Jouni  
 PA Valtion Teknillinen Tutkimuskeskus, Finland  
 SO PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9829477	A1	19980709	WO 1997-FI837	19971231
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
	RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	FI 9605305	A	19980701	FI 1996-5305	19961231
	FI 105566	B1	20000915		
	AU 9853242	A	19980731	AU 1998-53242	19971231
	EP 950074	A1	19991020	EP 1997-950215	19971231
	EP 950074	B1	20051102		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	AT 308578	T	20051115	AT 1997-950215	19971231
	US 2001021733	A1	20010913	US 2001-846202	20010502
	US 6780903	B2	20040824		
PRAI	FI 1996-5305	A	19961231		
	WO 1997-FI837	W	19971231		
	US 1999-331971	B1	19990820		

AB A mixture is first formed of a biodegradable polymer component, a plasticizer, dispersion auxiliaries, and water, the mixture is then heated to approx. 20-100° in order to form a paste-like composition, and the paste-like composition is dispersed in water. The dispersion can be used for coating paper or board, as a primer, and as a component in adhesives, paint, or lacquer, and it is also suited for the manufacture of cast films and for use as a binder in materials based on cellulosic fibers. A dispersion typically contained starch acetate 50.0, Mowiol 5, Tween 21 1.2, triacetin 50, and water 100 g.

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s Tarvainen Maarit/AU  
 L6 7 TARVAINEN MAARIT/AU

=> dis 16 1-7 bib abs

L6 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2005:705012 CAPLUS  
 DN 143:482837  
 TI Effects of RM-β-CD on sublingual bioavailability of



A9-tetrahydrocannabinol in rabbits

AU Mannila, Janne; Jaervinen, Tomi; Jaervinen, Kristiina; Tarvainen, Maarit; Jarho, Pekka

CS Department of Pharmaceutical Chemistry, University of Kuopio, Kuopio, FIN-70211, Finland

SO European Journal of Pharmaceutical Sciences (2005), 26(1), 71-77  
CODEN: EPSCED; ISSN: 0928-0987

PB Elsevier B.V.

DT Journal

LA English

AB The purpose of the present study was to develop novel cyclodextrin-containing sublingual formulations of cannabinoids. Complexation of model cannabinoids, A9-tetrahydrocannabinol (THC) and cannabidiol (CBD), with randomly methylated  $\beta$ -cyclodextrin (RM- $\beta$ -CD) and hydroxypropyl- $\beta$ -cyclodextrin (HP- $\beta$ -CD), were studied by the phase-solubility method. Due to better complexation efficiency, RM- $\beta$ -CD was selected for further studies. Solid THC/RM- $\beta$ -CD and CBD/RM- $\beta$ -CD complexes were prepared by freeze-drying. The dissolns. of both THC and CBD in the presence and absence of RM- $\beta$ -CD were determined. THC was selected for in vivo studies: the pharmacokinetics of THC after both sublingual and oral administrations of ethanolic THC and THC/RM- $\beta$ -CD complex solns. were studied in rabbits. The aqueous solubility of CBD and THC increased as a function of CD concentration, showing AL- and AP-type diagrams for HP- $\beta$ -CD and RM- $\beta$ -CD, resp. Dissoln. rates of THC/RM- $\beta$ -CD and CBD/RM- $\beta$ -CD complexes were significantly ( $p < 0.05$ ) higher than those of plain THC and plain CBD, resp. The absolute bioavailability (F) of THC decreased in the following order: sublingual THC/RM- $\beta$ -CD solution ( $F = 12.1 \pm 1.4\%$ ; mean  $\pm$  S.D.;  $n = 4$ ) > oral THC/RM- $\beta$ -CD solution ( $F = 4.0 \pm 6.0\%$ )  $\geq$  sublingual ethanolic THC solution ( $F = 3.8 \pm 2.8\%$ ) > oral ethanolic THC solution ( $F = 1.3 \pm 1.4\%$ ). These results demonstrate that RM- $\beta$ -CD increases both the aqueous solubility and dissoln. rate of these cannabinoids, making the development of novel sublingual formulation possible. These results also suggest that the sublingual administration of a THC/RM- $\beta$ -CD complex substantially increases the bioavailability of THC in rabbits.

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:656000 CAPLUS

TI Starch acetate as a coating polymer for oral extended release products

AU Tarvainen, Maarit; Sutinen, Riitta; Peltonen, Soili; Paronen, Petteri; Ketolainen, Jarkko

CS Department of Pharmaceutics, University of Kuopio, Kuopio, FI-70211, Finland

SO Abstracts of Papers, 228th ACS National Meeting, Philadelphia, PA, United States, August 22-26, 2004 (2004), CELL-031 Publisher: American Chemical Society, Washington, D. C.  
CODEN: 69FTZ8

DT Conference; Meeting Abstract

LA English

AB Currently, for environmental and economic reasons, the pharmaceutical industry is widely replacing film coatings based on organic polymer solns. by aqueous coating processes. Due to limitations with the existing aqueous polymer dispersions used in pharmaceutical coatings, there is a need for novel polymers with better film-forming characteristics to be used in oral extended release products. Our aim was to evaluate properties of starch acetate (SA) having a high degree of substitution (2.8) as a novel coating polymer for oral extended release products. Besides film-forming, mech. and permeability properties, also the plasticization of SA was evaluated.

These studies were performed both with organic solvent and aqueous dispersion-based SA films.

L6 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:292041 CAPLUS  
 DN 140:305612  
 TI Polymer solution and dispersion and a process for the preparation thereof  
 IN Mikkonen, Hannu; Tarvainen, Maarit; Peltonen, Soili; Paronen, Timo Petteri  
 PA Valtion Teknillinen Tutkimuskeskus, Finland  
 SO PCT Int. Appl., 41 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004029097	A1	20040408	WO 2003-FI700	20030925
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	FI 2002001730	A	20040328	FI 2002-1730	20020927
	FI 113874	B1	20040630		
	CA 2500126	A1	20040408	CA 2003-2500126	20030925
	AU 2003266424	A1	20040419	AU 2003-266424	20030925
	EP 1546207	A1	20050629	EP 2003-798208	20030925
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	US 2006148943	A1	20060706	US 2006-528993	20060111
PRAI	FI 2002-1730	A	20020927		
	WO 2003-FI700	W	20030925		
AB	The invention relates to a polymer dispersion or solution containing a hydrophobic polysaccharide (cellulose or starch derivative), which is dispersed or dissolved in liquid phase, and plasticizer composition of the polysaccharide, whereby at least 10% by weight of the plasticizer composition				
is	formed from alkenylsuccinic anhydride. The invention also relates to the preparation of polymer dispersions and solns. and to the films and coatings produced from them. The dispersions according to the invention are stable, and coating with excellent film-forming properties can be prepared from them.				

L6 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2004:275168 CAPLUS  
 DN 141:212577  
 TI Aqueous starch acetate dispersion as a novel coating material for controlled release products  
 AU Tarvainen, Maarit; Peltonen, Soili; Mikkonen, Hannu; Elovaara, Minna; Tuunainen, Minna; Paronen, Petteri; Ketolainen, Jarkko; Sutinen, Riitta  
 CS Department of Pharmaceutics, University of Kuopio, Kuopio, FIN-70211, Finland  
 SO Journal of Controlled Release (2004), 96(1), 179-191  
 CODEN: JCREEC; ISSN: 0168-3659  
 PB Elsevier

DT Journal  
LA English

AB The aim of this study was to evaluate film-formation properties of a novel, organic solvent-free aqueous dispersion of potato starch acetate (SA; degree of substitution 2.8) and its ability to control drug release from a coated tablet. Initially, film-formation mechanisms and drug permeabilities of both organic solvent and dispersion-based SA free films (prepared by cast or spraying techniques) were investigated. The SA dispersion was suitable for the fluid-bed coating process, forming strong films with complete coalescent polymeric spheres. The model compds. predominantly permeated via the micro-pores of SA free films, which resulted from the leaching of water-soluble excipients from the dispersion. Thus, the permeation rate depended on the film structure rather than the physico-chemical properties of the penetrant. In the case of SA-coated tablet, drug release was sustained when the coating level was increased (from 12% to 20%, stated as a weight gain), and also as lipophilicity of the drug increased. When compared to the reference polymer dispersion (Surelease), SA coatings showed better mech. properties against the osmotic pressure caused by a hydrophilic core tablet. These results clearly demonstrate that SA dispersion has high utility as a novel aqueous coating material for controlled release products.

RE.CNT 37 THERE ARE 37 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2003:598185 CAPLUS  
DN 140:205001

TI Enhanced film-forming properties for ethyl cellulose and starch acetate using n-alkenyl succinic anhydrides as novel plasticizers

AU Tarvainen, Maarit; Sutinen, Riitta; Peltonen, Solli; Mikkonen, Hannu; Maunus, Jaana; Vaha-Heikkila, Kalle; Lehto, Vesa-Pekka; Paronen, Petteri

CS Department of Pharmaceutics, University of Kuopio, Kuopio, FIN-70211, Finland

SO European Journal of Pharmaceutical Sciences (2003), 19(5), 363-371  
CODEN: EPSCED; ISSN: 0928-0987

PB Elsevier B.V.

DT Journal  
LA English

AB The aim of this study was to investigate the ability of n-alkenyl succinic anhydrides (n-ASAs) to improve the film-forming characteristics of a novel coating polymer, potato starch acetate degree of substitution 2.8 (SA). N-ASAs were also applied to improve the otherwise brittle properties of Et cellulose (EC) aqueous dispersion (Aquacoat) and EC solvent-based films. The effectiveness of two n-ASAs, 2-octenyl succinic anhydride (OSA) and 2-dodecene-1-yl succinic anhydride were evaluated as plasticizers. Mech. properties, both water vapor and drug permeabilities, and glass transition temps. of the cast free films were measured. Tri-Et citrate and di-Bu sebacate were used as reference plasticizers. The long hydrocarbon chain of n-ASA, with its accessible carbonyl groups, enabled a strong plasticization effect on the tested polymers. Due to the excellent mech. properties (i.e., a tough film structure with considerable flexibility) and low permeability of the plasticized films, n-ASAs, and especially OSA

proved

to be an ideal plasticizer particularly for EC based coatings. Also, the EC aqueous dispersion plasticized with n-ASAs resulted in a markedly enhanced coalescence of the colloidal polymer particles, even at low drying temps. In applications where a coating with high flexibility is required, n-ASAs can be used as plasticizers at moderately high concns. (up to 60-70%, weight/weight) without losing the high tensile strength, excellent toughness

and

low permeability of EC and SA films.

RE.CNT 33      THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2002:67839 CAPLUS  
DN 137:174775  
TI Starch acetate-a novel film-forming polymer for pharmaceutical coatings  
AU Tarvainen, Maarit; Sutinen, Riitta; Peltonen, Soili; Tiihonen,  
Paivi; Paronen, Petteri  
CS Department of Pharmaceutics, University of Kuopio, Kuopio, FIN-70211,  
Finland  
SO Journal of Pharmaceutical Sciences (2002), 91(1), 282-289  
CODEN: JPMSAE; ISSN: 0022-3549  
PB Wiley-Liss, Inc.  
DT Journal  
LA English  
AB Starch acetates (SA) have been investigated as novel, multifunctional  
excipients for the direct compression tableting process. In this study,  
the film-forming ability of SA (DS 2.8) and the effect of commonly used  
plasticizers on the phys. properties of SA films were evaluated. The  
results were compared with the properties of ethylcellulose (EC). Free  
films were prepared by a solvent-cast method. Mech. studies, water vapor  
and drug permeability tests, and thermal anal. (DSC) were used to  
characterize the film-forming ability of SA and efficiency of tested  
plasticizers. SA films were tougher and stronger than EC films at the  
same plasticizer concentration Also, in most cases, the water vapor  
permeability  
of SA films was lower than that of EC films. DSC thermograms supported  
the findings of the tensile test: plasticizers with several small ester  
groups (e.g., triacetin and tri-Et citrate) were the most compatible with  
SA. Due to the good mech. properties, low water vapor, and drug  
permeabilities of the films, SA seems to be a promising film-former for  
pharmaceutical coatings. The toughness of SA films may result from their  
dense film structure, which is due to strong interaction forces between  
adjacent SA mol. chains.

RE.CNT 28      THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L6 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2002:18249 CAPLUS  
DN 137:174746  
TI Predicting plasticization efficiency from three-dimensional molecular  
structure of a polymer plasticizer  
AU Tarvainen, Maarit; Sutinen, Riitta; Somppi, Marja; Paronen,  
Petteri; Poso, Antti  
CS Department of Pharmaceutics, University of Kuopio, Kuopio, FIN-70211,  
Finland  
SO Pharmaceutical Research (2001), 18(12), 1760-1766  
CODEN: PHREEB; ISSN: 0724-8741  
PB Kluwer Academic/Plenum Publishers  
DT Journal  
LA English  
AB Purpose. In polymeric coatings, plasticizers are used to improve the  
film-forming characteristic of the polymers. In this study, a  
computerized method (VolSurf with GRID) was used as a novel tool for the  
prediction plasticization efficiency ( $\beta$ ) of test compds., and for  
determining the critical mol. properties needed for polymer plasticization.  
Methods. The film-former, starch acetate DS 2.8 (SA), was plasticized with  
each of 24 tested compds. A decrease in glass transition temperature of the  
plasticized free films (determined by differential scanning calorimeter (DSC))  
was used as an indicator for  $\beta$ . Partial least squares discriminant  
anal. was used to correlate the exptl. data with the theor. mol.

properties of the plasticizers. Results. A good correlation ( $r^2 = 0.77$ ,  $q^2 = 0.58$ ) between the mol. modeling results and the exptl. data demonstrated that  $\beta$  can be predicted from the three-dimensional mol. structure of a compound. Favorable structural properties identified for the potent SA plasticizer were strong hydrogen bonding capacity and a definitive hydrophobic region on the mol. Conclusions. The VolSurf method is a valuable tool for predicting the plasticization efficiency of a compound. The correlation between exptl. and calculated glass transition temperature values verifies that physicochem. properties are primary factors influencing plasticization efficiency of a compound.

RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s Peltonen Soili/AU  
L7 42 PELTONEN SOILI/AU

=> s l7 and plastic?  
686851 PLASTIC?  
L8 13 L7 AND PLASTIC?

=> dis l8 1-13 bib abs

L8 ANSWER 1 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2005:589260 CAPLUS  
DN 143:117044  
TI Process for producing fiber composites  
IN Buchert, Johanna; Groenqvist, Stina; Mikkonen, Hannu; Oksanen, Tarja; Peltonen, Soili; Suurnaekki, Anna; Viikari, Liisa  
PA Valtion Teknillinen Tutkimuskeskus, Finland  
SO PCT Int. Appl., 24 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005061791	A1	20050707	WO 2004-FI794	20041223
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	FI 2003001902	A	20050624	FI 2003-1902	20031223
	CA 2549525	A1	20050707	CA 2004-2549525	20041223
	EP 1697586	A1	20060906	EP 2004-805189	20041223
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
	BR 2004018090	A	20070417	BR 2004-18090	20041223
	US 2007164468	A1	20070719	US 2006-583339	20061002
PRAI	FI 2003-1902	A	20031223		
	WO 2004-FI794	W	20041223		
AB	The invention provides a novel way of producing biodegradable composites comprising a hydrophobic polymer material and a reinforcing component of fibers derived from plant materials. Composite material produced by means				

of the present invention has improved strength properties and enhanced adhesion between the bifunctional fiber and the natural or synthetic polymer. A process for producing a composite comprising a lignocellulosic fibrous matrix, having phenolic groups, and a hydrophobic polymer, comprises the steps of (a) oxidizing the phenolic groups or the groups having a similar structure to provide an oxidized fiber material, (b) contacting the oxidized fiber material with a modifying agent containing at least one first functional portion, which is compatible with the oxidized fiber material, and at least one second hydrophobic portion, which is compatible with the hydrophobic polymer, to provide a lignocellulosic fiber material having a modified surface, and (c) contacting the fiber material with the hydrophobic polymer under conditions allowing for intimate contacting between the modified fiber and the polymer to form a composite.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 13 CAPLUS COPYRIGHT 2008 ACS ON STN  
AN 2005:300511 CAPLUS  
DN 142:356961

TI Starch derivative pigment and filler and a method of manufacturing it  
IN Peltonen, Soili; Mikkonen, Hannu; Quintus-Leino, Pia; Varjos,  
Petri; Kataja, Kirsi

PA Valtion Teknillinen Tutkimuskeskus, Finland

SO PCT Int. Appl., 49 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030844	A1	20050407	WO 2004-F1575	20041001
WO 2005030844	A9	20060511		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
FI 2004000741	A	20050403	FI 2004-741	20040531
FI 118179	B1	20070815		
EP 1685185	A1	20060802	EP 2004-767089	20041001
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
CN 1863847	A	20061115	CN 2004-80028790	20041001
JP 2007507572	T	20070329	JP 2006-530313	20041001
US 2007101904	A1	20070510	US 2006-573041	20061222
PRAI FI 2003-5173	A	20031002		
FI 2004-741	A	20040531		
WO 2004-F1575	W	20041001		

AB The invention relates to a light, biodegradable, organic pigment and filler, and a method of manufacturing it. According to the invention, a solution comprising a starch derivative is first prepared by dissolving the starch derivative

into a suitable solvent, and, after that, the solution is brought into contact with a non-solvent to precipitate the starch derivative from the solvent,

and, as a result, a dispersion is obtained, one which comprises a precipitate consisting of starch derivative and a liquid phase formed of the solvent and the

non-solvent, after which the solvent is removed from the liquid phase and the precipitate is separated from the non-solvent and recovered. The invention can

be used to manufacture both a product comprising 100-300 nm spherical particles, which is suitable for use as a pigment, and a coral-like, porous product which is particularly suitable as a filler. The particles are useful in paper, cardboard, paints, plastics, rubbers, cosmetics, hygienic products, and detergents.

RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 3 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:656000 CAPLUS

TI Starch acetate as a coating polymer for oral extended release products

AU Tarvainen, Maarit; Sutinen, Riitta; Peltonen, Soili; Paronen, Petteri; Ketola, Jarkko

CS Department of Pharmaceutics, University of Kuopio, Kuopio, FI-70211, Finland

SO Abstracts of Papers, 228th ACS National Meeting, Philadelphia, PA, United States, August 22-26, 2004 (2004), CELL-031 Publisher: American Chemical Society, Washington, D. C.  
CODEN: 69FTZ8

DT Conference; Meeting Abstract

LA English

AB Currently, for environmental and economic reasons, the pharmaceutical industry is widely replacing film coatings based on organic polymer solns. by aqueous coating processes. Due to limitations with the existing aqueous

polymer dispersions used in pharmaceutical coatings, there is a need for novel polymers with better film-forming characteristics to be used in oral extended release products. Our aim was to evaluate properties of starch acetate (SA) having a high degree of substitution (2.8) as a novel coating polymer for oral extended release products. Besides film-forming, mech. and permeability properties, also the plasticization of SA was evaluated. These studies were performed both with organic solvent and aqueous dispersion-based SA films.

L8 ANSWER 4 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:292041 CAPLUS

DN 140:305612

TI Polymer solution and dispersion and a process for the preparation thereof

IN Mikkonen, Hannu; Tarvainen, Maarit; Peltonen, Soili; Paronen, Timo Petteri

PA Valtion Teknillinen Tutkimuskeskus, Finland

SO PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004029097	A1	20040408	WO 2003-FI700	20030925
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,				

KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

FI 2002001730 A 20040328 FI 2002-1730 20020927  
FI 113874 B1 20040630  
CA 2500126 A1 20040408 CA 2003-2500126 20030925  
AU 2003266424 A1 20040419 AU 2003-266424 20030925  
EP 1546207 A1 20050629 EP 2003-798208 20030925

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

US 2006148943 A1 20060706 US 2006-528993 20060111  
PRAI FI 2002-1730 A 20020927  
WO 2003-FI700 W 20030925

AB The invention relates to a polymer dispersion or solution containing a hydrophobic polysaccharide (cellulose or starch derivative), which is dispersed or dissolved in liquid phase, and plasticizer composition of the polysaccharide, whereby at least 10% by weight of the plasticizer composition is formed from alkenylsuccinic anhydride. The invention also relates to the preparation of polymer dispersions and solns. and to the films and coatings produced from them. The dispersions according to the invention are stable, and coating with excellent film-forming properties can be prepared from them.

L8 ANSWER 5 OF 13 CAPLUS COPYRIGHT 2008 ACS ON STN  
AN 2003:598185 CAPLUS  
DN 140:205001  
TI Enhanced film-forming properties for ethyl cellulose and starch acetate using n-alkenyl succinic anhydrides as novel plasticizers  
AU Tarvainen, Maarit; Sutinen, Riitta; Peltonen, Soili; Mikkonen, Hannu; Maunus, Jaana; Vaha-Heikkila, Kalle; Lehto, Vesa-Pekka; Paronen, Petteri  
CS Department of Pharmaceutics, University of Kuopio, Kuopio, FIN-70211, Finland  
SO European Journal of Pharmaceutical Sciences (2003), 19(5), 363-371  
CODEN: EPSCED; ISSN: 0928-0987  
PB Elsevier B.V.  
DT Journal  
LA English  
AB The aim of this study was to investigate the ability of n-alkenyl succinic anhydrides (n-ASAs) to improve the film-forming characteristics of a novel coating polymer, potato starch acetate degree of substitution 2.8 (SA). N-ASAs were also applied to improve the otherwise brittle properties of Et cellulose (EC) aqueous dispersion (Aquacoat) and EC solvent-based films. The effectiveness of two n-ASAs, 2-octenyl succinic anhydride (OSA) and 2-dodecene-1-yl succinic anhydride were evaluated as plasticizers. Mech. properties, both water vapor and drug permeabilities, and glass transition temps. of the cast free films were measured. Tri-Et citrate and di-Bu sebacate were used as reference plasticizers. The long hydrocarbon chain of n-ASA, with its accessible carbonyl groups, enabled a strong plasticization effect on the tested polymers. Due to the excellent mech. properties (i.e., a tough film structure with considerable flexibility) and low permeability of the plasticized films, n-ASAs, and especially OSA proved to be an ideal plasticizer particularly for EC based coatings. Also, the EC aqueous dispersion plasticized with n-ASAs resulted in a markedly enhanced coalescence of the colloidal polymer particles, even at low drying temps. In applications where a coating with high flexibility is required, n-ASAs can be used as plasticizers at moderately high concns. (up to 60-70%, weight/weight) without losing the high tensile strength, excellent toughness and low permeability of EC and SA films.

RE.CNT 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT



L8 ANSWER 6 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2002:575386 CAPLUS  
 DN 137:133034

TI Electrically conducting plasticizer composition and process for  
 the production thereof  
 IN Kirmanen, Pauli; Kaernae, Toivo; Heikkinen, Erkki; Peltonen, Soili  
 PA Panipol Oy, Finland  
 SO PCT Int. Appl., 24 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002059907	A1	20020801	WO 2002-FI53	20020123
WO 2002059907	A8	20031113		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
FI 2001000137	A	20020724	FI 2001-137	20010123
AU 2002229799	A1	20020806	AU 2002-229799	20020123
FRAI FI 2001-137	A	20010123		
WO 2002-FI53	W	20020123		

AB The invention relates to an elec. conductive plasticizer composition and to a process for the preparation thereof. The composition according to the invention comprises 50-95 parts by weight of a plasticizer for thermoplastics and 50-5 parts by weight of polyaniline and its counterion, which together form a doped polyaniline complex dissolved or dispersed in the plasticizer. By means of the invention it is possible to prepare, e.g., an elec. conductive PVC film by mixing together 10-50 parts by weight of the plasticizer composition, 1-90 parts by weight of a PVC emulsion and 0-10 parts by weight of auxiliary agents and colorants, known per se, to form a PVC mixture, by spreading the mixture onto a substrate to form a continuous layer, and by solidifying the composition to form an elec. conductive film.

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 2002:226390 CAPLUS  
 DN 137:284121

TI Acetylation enhances the tableting properties of starch  
 AU Raatikainen, Pasi; Korhonen, Ossi; Peltonen, Soili; Paronen, Petteri  
 CS Department of Pharmaceutics, University of Kuopio, Kuopio, FIN-70211, Finland  
 SO Drug Development and Industrial Pharmacy (2002), 28(2), 165-175  
 CODEN: DDIPD8; ISSN: 0363-9045  
 PB Marcel Dekker, Inc.  
 DT Journal  
 LA English  
 AB The aim of this study was the evaluation of starch acetate (SA) powders used as tablet excipients. Deformation during powder volume reduction, strain-rate sensitivity, intrinsic elasticity of the materials, and

tensile strength of the tablets were examined. Results showed that SA with the lowest degree of substitution (ds) still possessed characteristics of native starch granules. Due to dissoln. in synthesis, the properties of higher ds SAs depended on precipitation and drying processes. The acetate moiety,

perhaps in combination with existing hydroxyl groups, was a very effective bond-forming substituent. The formation of strong mol. bonds increased, leading to a very firm and intact tablet structure. Small changes existed in compression-induced deformation due to acetylation. Some fragmentation was induced due to the slightly harder and more irregular shape of high-substituted SA particles. The plastic flow under compression was enhanced. Acetylated material was slightly less sensitive to fast elastic recovery in-die, but somewhat more elastic out-of-die. In spite of their superior bonding, SAs under compression behaved similarly to native starches. It was concluded that deformation properties were more the consequence of the mol. chain structure properties of the starch polymer than the effect of the acetate moiety itself. In contrast, the opposite seemed to be the case with the extensive improvement in bond-forming properties.

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 8 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2002:67839 CAPLUS  
DN 137:174775  
TI Starch acetate-a novel film-forming polymer for pharmaceutical coatings  
AU Tarvainen, Maarit; Sutinen, Riitta; Peltonen, Soili; Tiinonen, Paivi; Paronen, Petteri  
CS Department of Pharmaceutics, University of Kuopio, Kuopio, FIN-70211, Finland  
SO Journal of Pharmaceutical Sciences (2002), 91(1), 282-289  
CODEN: JPMSAE; ISSN: 0022-3549  
PB Wiley-Liss, Inc.  
DT Journal  
LA English  
AB Starch acetates (SA) have been investigated as novel, multifunctional excipients for the direct compression tableting process. In this study, the film-forming ability of SA (DS 2.8) and the effect of commonly used plasticizers on the phys. properties of SA films were evaluated. The results were compared with the properties of ethylcellulose (EC). Free films were prepared by a solvent-cast method. Mech. studies, water vapor and drug permeability tests, and thermal anal. (DSC) were used to characterize the film-forming ability of SA and efficiency of tested plasticizers. SA films were tougher and stronger than EC films at the same plasticizer concentration. Also, in most cases, the water vapor permeability of SA films was lower than that of EC films. DSC thermograms supported the findings of the tensile test: plasticizers with several small ester groups (e.g., triacetin and tri-Et citrate) were the most compatible with SA. Due to the good mech. properties, low water vapor, and drug permeabilities of the films, SA seems to be a promising film-former for pharmaceutical coatings. The toughness of SA films may result from their dense film structure, which is due to strong interaction forces between adjacent SA mol. chains.

RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1998:485114 CAPLUS  
DN 129:136909  
TI Preparation of biodegradable polymer dispersions and their use  
IN Peltonen, Soili; Heikkila, Maija Elina; Mikkonen, Hannu; Hamara, Jouni

PA Valtion Teknillinen Tutkimuskeskus, Finland  
 SO PCT Int. Appl., 27 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9829477	A1	19980709	WO 1997-FI837	19971231
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FI 9605305	A	19980701	FI 1996-5305	19961231
FI 105566	B1	20000915		
AU 9853242	A	19980731	AU 1998-53242	19971231
EP 950074	A1	19991020	EP 1997-950215	19971231
EP 950074	B1	20051102		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
AT 308578	T	20051115	AT 1997-950215	19971231
US 2001021733	A1	20010913	US 2001-846202	20010502
US 6780903	B2	20040824		
PRAI FI 1996-5305	A	19961231		
WO 1997-FI837	W	19971231		
US 1999-331971	B1	19990820		
AB A mixture is first formed of a biodegradable polymer component, a plasticizer, dispersion auxiliaries, and water, the mixture is then heated to approx. 20-100° in order to form a paste-like composition, and the paste-like composition is dispersed in water. The dispersion can be used for coating paper or board, as a primer, and as a component in adhesives, paint, or lacquer, and it is also suited for the manufacture of cast films and for use as a binder in materials based on cellulosic fibers. A dispersion typically contained starch acetate 50.0, Mowiol 5, Tween 21 1.2, triacetin 50, and water 100 g.				
RE.CNT 4			THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD	
			ALL CITATIONS AVAILABLE IN THE RE FORMAT	

L8 ANSWER 10 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1998:485096 CAPLUS  
 DN 129:124034

TI Manufacture and use of hydroxyalkylated starch ester  
 IN Peltonen, Soili; Tiitola, Pertti; Vuorenmaa, Jani; Happonen, Harri; Tormala, Pertti

PA Valtion Teknillinen Tutkimuskeskus, Finland  
 SO PCT Int. Appl., 33 pp.  
 CODEN: PIXXD2

DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9829456	A1	19980709	WO 1997-FI836	19971231
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

FI 9605304 A 19980701 FI 1996-5304 19961231  
 FI 107930 B1 20011031  
 CA 2276329 A1 19980709 CA 1997-2276329 19971231  
 CA 2276329 C 20070213  
 AU 9853241 A 19980731 AU 1998-53241 19971231  
 EP 951483 A1 19991027 EP 1997-950214 19971231  
 EP 951483 B1 20050831

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI

AT 303405 T 20050915 AT 1997-950214 19971231  
 US 6369215 B1 20020409 US 1999-331972 19990819  
 PRAI FI 1996-5304 A 19961231  
 WO 1997-FI836 W 19971231

AB Hydroxypropylated starch esters (HPS) with relatively low molar substitution of the hydroxypropyl group ( $\leq 2$ ; typically 0.05-1.2) and a high ester group substitution degree ( $\geq 1$ ; typically 1.5-3) are manufactured by hydroxypropylation of a starch-containing base material in an aqueous alkanol medium followed by esterification, e.g., acetylation with Ac2O in AcOH in the presence of NaOAc catalyst. A starch composition containing 90-60% HPS ester and 10-40% of a plasticizer, and its use in biodegradable thermoplastic compns. which are suitable for coating of board or paper, as components in labeling adhesives or paints, in manufacture of fibers and nonwoven fabrics, etc., are also claimed.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1998:42451 CAPLUS  
 DN 128:90263  
 TI Solventless hydrophobic biodegradable polymer dispersions, their manufacture and uses  
 IN Haasmaa, Kristiina; Paronen, Timo Petteri; Urtti, Arto Olavi; Peltonen, Soili; Heikkilä, Maija Elina; Vuorenpaa, Jani  
 PA Oy Polymer Corex Kuopio Ltd., Finland  
 SO PCT Int. Appl., 37 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9749762	A1	19971231	WO 1997-FI410	19970625
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, BG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
FI 9602627	A	19971226	FI 1996-2627	19960625
FI 108038	B1	20011115		
AU 9732642	A	19980114	AU 1997-32642	19970625
EP 907681	A1	19990414	EP 1997-928289	19970625
EP 907681	B1	20040428		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE				
AT 265493	T	20040515	AT 1997-928289	19970625

	ES 2221053	T3	20041216	ES 1997-928289	19970625
	US 6656984	B1	20031202	US 1999-202981	19990224
	US 2002032254	A1	20020314	US 2001-970952	20011005
PRAI	FI 1996-2627	A	19960625		
	WO 1997-FI410	W	19970625		
	US 1999-202981	A3	19990224		

AB The dispersions are manufactured from starch ester by mixing it with a plasticizer, then with dispersion admixts. and water at an elevated temperature so as to form a dispersion. The plasticizing of the starch ester and the dispersion of the mixture in water can be performed in an extruder. The obtained dispersion is homogenized in order to improve its stability. The dispersion can be used to coat paper or board, as a primer or a component in paint or labeling adhesives, and it is also suitable for the production of cast films and as a binder in materials based on cellulose fibers, as well as for coating medicinal prepn's. Thus, plasticizing 50 g a starch acetate having DS of 2.8 with 87.5 g Triacetin under heating, adding 12 mL of a solution of 16.3 g a hydroxypropyl starch (Cohpol LL100) in 220 g water to the resulting homogeneous melt, stirring for 15 min, and slowly adding the rest of the solution to the mixture under intensive stirring while heating at 90° gave a dispersion with good dispersibility.

L8 ANSWER 12 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1997:215728 CAPLUS

DN 126:200868

TI Thermoplasticized starch component and process for the preparation thereof

IN Seppaelae, Jukka; Malin, Minna; Peltonen, Soili; Heikkilae,

Elina; Vuorenpaee, Jani

PA Primalco Ltd., Finland

SO PCT Int. Appl., 56 pp.

CODEN: P1XXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9703120	A1	19970130	WO 1996-FI402	19960710
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
	FI 9503408	A	19970113	FI 1995-3408	19950712
	FI 108456	B1	20020131		
	FI 9503655	A	19970202	FI 1995-3655	19950801
	FI 102284	B	19981113		
	FI 102284	B1	19981113		
	FI 9602782	A	19970202	FI 1996-2782	19960708
	FI 102682	B	19990129		
	FI 102682	B1	19990129		
	CA 2226579	A1	19970130	CA 1996-2226579	19960710
	AU 9663077	A	19970210	AU 1996-63077	19960710
	AU 708631	B2	19990805		
	EP 837902	A1	19980429	EP 1996-922067	19960710
	EP 837902	B1	20040317		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 11514391	T	19991207	JP 1996-505528	19960710
	AT 262006	T	20040415	AT 1996-922067	19960710
	WO 9801493	A1	19980115	WO 1997-FI416	19970627
	W: US				

RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE  
 EP 910598 A1 19990428 EP 1997-928293 19970627  
 EP 910598 B1 20050511  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE  
 AT 295386 T 20050515 AT 1997-928293 19970627  
 ES 2241051 T3 20051016 ES 1997-928293 19970627  
 US 6011092 A 20000104 US 1998-981933 19980112  
 PRAI FI 1995-3408 A 19950712  
 FI 1995-3655 A 19950801  
 FI 1996-2782 A 19960708  
 WO 1996-FI402 W 19960710  
 WO 1997-FI416 W 19970627

AB The starch component containing hydroxyl groups capable of reacting with isocyanate groups is modified so that it can be dissolved or gelatinized/plasticized in the melt of a hydroxy acid polymer. The starch component is then reacted with a thermoplastic component formed by a hydroxy acid polymer, in particular a lactic acid polymer, in order to produce a melt-processible, biol. degradable starch-based polymer, which can be used as an adhesive and for coating of paper and cardboard products and for preparation of injection molded and thermoformed articles. Thus, starch was acetylated with Ac2O, added (27 g) to a molten mixture containing 40 g 1,4-butanediol-L-lactic acid copolymer and 3.7 g 1,6-hexamethylene diisocyanate, and kneaded to prepare a polymer.

L8 ANSWER 13 OF 13 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1997:204176 CAPLUS

DN 126:200867

TI Melt processible and biodegradable starch composition and process for preparation and use

IN Happonen, Harri; Peltonen, Soili; Sievi-Korte, Mika; Toermaelae, Pertti; Vuorenpaee, Jani

PA Primalco Oy, Finland

SO PCT Int. Appl., 42 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9703121	A1	19970130	WO 1996-FI403	19960710
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA				
CA 2226578	A1	19970130	CA 1996-2226578	19960710
AU 9663078	A	19970210	AU 1996-63078	19960710
AU 700499	B2	19990107		
EP 837903	A1	19980429	EP 1996-922068	19960710
EP 837903	B1	20041222		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
JP 11509565	T	19990824	JP 1996-505529	19960710
AT 285440	T	20050115	AT 1996-922068	19960710
PRAI FI 1995-3409	A	19950712		
WO 1996-FI403	W	19960710		

AB The composition with improved biodegradability contains 5-99% a plasticized starch derivative and 1-95% a biodegradable fibrous material. The microstructure of the composition is discontinuous and formed by a phase containing the starch derivative and a phase containing the fibrous material and any porosity, and its impact strength is at least 10% better than the

corresponding values of a plasticized starch derivative. The composition may further contain 0.01-30% a biodegradable polyester, such as polylactide, polycaprolactone or a cellulose ester. According to the invention, the biodegradable starch composition is prepared by modification, e.g., esterification of starch in the presence of glycerol then blending with a biodegradable fibrous material for producing a composition which has a discontinuous microstructure. The invention provides a melt processible composition having good water resistance and mech. properties which can be regulated by changing the relative amts. and the qualities of the components of the composition

=> s Paronen Timo Petteri/AU  
L9 6 PARONEN TIMO PETTERI/AU

=> dis 19 1-6 bib abs

L9 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 2004:292041 CAPLUS  
DN 140:305612  
TI Polymer solution and dispersion and a process for the preparation thereof  
IN Mikkonen, Hannu; Tarvainen, Maarit; Peltonen, Soili; Paronen, Timo  
Petteri  
PA Valtion Teknillinen Tutkimuskeskus, Finland  
SO PCT Int. Appl., 41 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004029097	A1	20040408	WO 2003-FI700	20030925
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	FI 2002001730	A	20040328	FI 2002-1730	20020927
	FI 113874	B1	20040630		
	CA 2500126	A1	20040408	CA 2003-2500126	20030925
	AU 2003266424	A1	20040419	AU 2003-266424	20030925
	EP 1546207	A1	20050629	EP 2003-798208	20030925
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
	US 2006148943	A1	20060706	US 2006-528993	20060111
PRAI	FI 2002-1730	A	20020927		
	WO 2003-FI700	W	20030925		

AB The invention relates to a polymer dispersion or solution containing a hydrophobic polysaccharide (cellulose or starch derivative), which is dispersed or dissolved in liquid phase, and plasticizer composition of the polysaccharide, whereby at least 10% by weight of the plasticizer composition is formed from alkenylsuccinic anhydride. The invention also relates to the preparation of polymer dispersions and solns. and to the films and coatings produced from them. The dispersions according to the invention are stable, and coating with excellent film-forming properties can be prepared from them.

L9 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1998:42451 CAPLUS

DN 128:90263

TI Solventless hydrophobic biodegradable polymer dispersions, their manufacture and uses

IN Haasmaa, Kristiina; Paronen, Timo Petteri; Urtti, Arto Olavi; Peltonen, Soili; Heikkila, Maija Elina; Vuorenmaa, Jani

PA Oy Polymer Corex Kuopio Ltd., Finland

SO PCT Int. Appl., 37 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9749762	A1	19971231	WO 1997-FI410	19970625
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	FI 9602627	A	19971226	FI 1996-2627	19960625
	FI 108038	B1	20011115		
	AU 9732642	A	19980114	AU 1997-32642	19970625
	EP 907681	A1	19990414	EP 1997-928289	19970625
	EP 907681	B1	20040428		
	R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE, IE				
	AT 265493	T	20040515	AT 1997-928289	19970625
	ES 2221053	T3	20041216	ES 1997-928289	19970625
	US 6656984	B1	20031202	US 1999-202981	19990224
	US 2002032254	A1	20020314	US 2001-970952	20011005
PRAI	FI 1996-2627	A	19960625		
	WO 1997-FI410	W	19970625		
	US 1999-202981	A3	19990224		

AB The dispersions are manufactured from starch ester by mixing it with a plasticizer, then with dispersion admixts. and water at an elevated temperature so as to form a dispersion. The plasticizing of the starch ester and the dispersion of the mixture in water can be performed in an extruder. The obtained dispersion is homogenized in order to improve its stability. The dispersion can be used to coat paper or board, as a primer or a component in paint or labeling adhesives, and it is also suitable for the production of cast films and as a binder in materials based on cellulose fibers, as well as for coating medicinal prepsns. Thus, plasticizing 50 g starch acetate having DS of 2.8 with 87.5 g Triacetin under heating, adding 12 mL of a solution of 16.3 g a hydroxypropyl starch (Cohpol LL100) in 220 g water to the resulting homogeneous melt, stirring for 15 min, and slowly adding the rest of the solution to the mixture under intensive stirring while heating at 90° gave a dispersion with good dispersibility.

L9 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
AN 1997:539318 CAPLUS

DN 127:210360

TI Composition for pH dependent controlled release of active ingredients and methods for producing it

IN Urtti, Arto Olavi; Peltonen, Soili Hellevi; Paronen, Timo Petteri; Nakari, Leena Johanna; Vuorenmaa, Jani-emanuel

PA Alko Group Ltd., Finland

SO U.S., 24 pp., Cont.-in-part of U.S. Ser. No. 374,430.



CODEN: USXXAM  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5656292	A	19970812	US 1995-498341	19950705
	US 5667803	A	19970916	US 1995-374430	19950119
	CA 2222372	A1	19970123	CA 1996-2222372	19960429
	WO 9702018	A1	19970123	WO 1996-FI233	19960429
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
	RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN				
	AU 9655032	A	19970205	AU 1996-55032	19960429
	AU 703085	B2	19990318		
	EP 850049	A1	19980701	EP 1996-912051	19960429
	EP 850049	B1	20020626		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	HU 9900304	A2	19990628	HU 1999-304	19960429
	HU 9900304	A3	20010428		
	JP 11508581	T	19990727	JP 1997-504847	19960429
	AT 219663	T	20020715	AT 1996-912051	19960429
	PT 850049	T	20021031	PT 1996-912051	19960429
	ES 2176452	T3	20021201	ES 1996-912051	19960429
PRAI	FI 1994-2686	A	19940607		
	US 1995-374430	A2	19950119		
	US 1995-498341	A	19950705		
	WO 1996-FI233	W	19960429		

AB The present invention is related to a composition for pH dependent or pH regulated controlled release of active ingredients especially drugs. The composition consists of a compactible mixture of the active ingredient and starch mols. substituted with acetate and dicarboxylate residues. The preferred dicarboxylate acid is succinate. The average substitution<sup>o</sup> of the acetate residue is at least 1 and 0.2-1.2 for the dicarboxylate residue. The starch mols. can have the acetate and dicarboxylate residues attached to the same starch mol. backbone or attached to sep. starch mol. backbones. Starch acetate succinate was prepared by transesterification and in organic solvent without transesterification.

L9 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1997:211146 CAPLUS  
 DN 126:203716  
 TI Composition for pH-dependent controlled release of active ingredients and methods for producing it  
 IN Urtti, Arto Olavi; Peltonen, Soili Hellevi; Paronen, Timo Petteri  
 ; Nakari, Leena Johanna; Vuorenpaee, Jani-Emanuel  
 PA Alko Group Ltd., Finland  
 SO PCT Int. Appl., 61 pp.  
 CODEN: PIXXD2  
 DT Patent  
 LA English  
 FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9702018	A1	19970123	WO 1996-FI233	19960429
	W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT,				

LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI  
 RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN  
 US 5656292 A 19970812 US 1995-498341 19950705  
 AU 9655032 A 19970205 AU 1996-55032 19960429  
 AU 703085 B2 19990318  
 EP 850049 A1 19980701 EP 1996-912051 19960429  
 EP 850049 B1 20020626  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI  
 JP 11508581 T 19990727 JP 1997-504847 19960429  
 AT 219663 T 20020715 AT 1996-912051 19960429  
 PRAI US 1995-498341 A 19950705  
 FI 1994-2686 A 19940607  
 US 1995-374430 A2 19950119  
 WO 1996-FI233 W 19960429  
 AB The present invention is related to a composition for pH-dependent or pH-regulated controlled release of active ingredients especially drugs. The composition consists of a compactible mixture of the active ingredient and starch  
 mols. substituted with acetate and dicarboxylate residues. The preferred dicarboxylate acid is succinate. The average substitution degree of the acetate residue is at least 1 and 0.2-1.2 for the dicarboxylate residue. The starch mols. can have the acetate and dicarboxylate residues attached to the same starch mol. backbone or attached to sep. starch mol. backbones. The present invention also discloses methods for preparing the starch acetate dicarboxylates by transesterification or mixing of starch acetates and starch dicarboxylates resp. A tablet containing starch acetate succinate (degree of substitution 1.34 for acetyl and 0.25 for succinyl group) 74.5, theophylline 25, and Mg stearate 0.5 % was formulated and drug release rate was tested in different pH values. Theophylline was released completely in 20 min in pH 7 and 8 buffers and in a slightly acidic solution (pH 4 and 6), about 90 min was required to achieve complete drug release and 99 % and 83 % of the drug content was released in media of pH 2 and 1, resp. after 8 h.

L9 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN  
 AN 1996:164036 CAPLUS  
 DN 124:212080  
 TI Transdermal drug delivery system  
 IN Urtti, Arto Olavi; Sutinen, Marja Riitta; Paronen, Timo Petteri  
 PA Finland  
 SO Brit. UK Pat. Appl., 21 pp.  
 CODEN: BAXXDU  
 DT Patent  
 LA English  
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2290964	A	19960117	GB 1994-13866	19940708
	CA 2193129	A1	19960125	CA 1995-2193129	19950620
	CA 2193129	C	20071106		
	WO 9601626	A1	19960125	WO 1995-FI358	19950620
	W: AU, BG, BR, BY, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KG, KP, KR, KZ, LT, LV, MX, NO, NZ, PL, PT, RO, RU, SG, SI, SK, TJ, UA, US, UZ, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	AU 9527405	A	19960209	AU 1995-27405	19950620
	EP 764020	A1	19970326	EP 1995-922554	19950620
	EP 764020	B1	19990407		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				

JP 10502388	T	19980303	JP 1996-504133	19950620
JP 3734267	B2	20060111		
AT 178485	T	19990415	AT 1995-922554	19950620
ES 2130622	T3	19990701	ES 1995-922554	19950620
FI 9700053	A	19970107	FI 1997-53	19970107
PRAI GB 1994-13866	A	19940708		
WO 1995-FI358	W	19950620		

AB A controlled-release transdermal system for the delivery of at least one therapeutic agent comprises: a reservoir comprising (a) the therapeutic agent (e.g. weak acid or base) in ionized form, (b) a pH-adjusting agent which upon uptake of water is converted to a buffer solution, and (c) a cyclized polysaccharide e.g. cyclodextrin, cyclodextrin derivative or cyclodextrin polymer, capable of improving the solubility of the therapeutic agent in the buffer solution by forming an inclusion complex with the therapeutic agent; and a reservoir wall comprising a polymer substantially impermeable to the ionized form or to the inclusion complex form of the therapeutic agent, but permeable to water and to the unionized form of the therapeutic agent. Water from skin penetrates the reservoir causing the pH-adjusting agent to form a buffer solution and the change in pH causes the unionized form to permeate the reservoir wall. Upon partitioning of the unionized form to the reservoir wall, more therapeutic agent is released from the cyclized polysaccharide complex. The effect of cyclodextrin was determined using reservoir-type silicone depot patches. Dexmedetomidine (I) was placed with Na<sub>2</sub>HPO<sub>4</sub> and 2-hydroxypropyl- $\beta$ -cyclodextrin on a cut piece of silicone membrane. The membrane was covered with a rate-limiting membrane (not disclosed) using Silastic adhesive and in vitro release of I was observed. Addition of the cyclodextrin to the buffered devices increased I release rate 2.7-5.5 times.

L9 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN

AN 1996:113428 CAPLUS

DN 124:156029

TI Starch acetate with modifiable properties for use in controlled-release formulations

IN Paronen, Timo Petteri; Peltonen, Soili Hellevi; Urtti, Arto Olavi; Nakari, Leena Johanna

PA Alko Group Ltd., Finland

SO PCT Int. Appl., 58 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9533450	A1	19951214	WO 1995-FI331	19950607
	W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
	RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	CA 2190181	A1	19951214	CA 1995-2190181	19950607
	AU 9526182	A	19960104	AU 1995-26182	19950607
	AU 712839	B2	19991118		
	HU 75773	A2	19970528	HU 1996-3351	19950607
	EP 806942	A1	19971119	EP 1995-920923	19950607
	EP 806942	B1	20030416		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
	JP 10502056	T	19980224	JP 1996-500408	19950607
	AT 237315	T	20030515	AT 1995-920923	19950607
	PT 806942	T	20030731	PT 1995-920923	19950607

	ES 2192577	T3	20031016	ES 1995-920923	19950607
	FI 9604770	A	19970129	FI 1996-4770	19961129
	FI 113273	B1	20040331		
PRAI	FI 1994-2686	A	19940607		
	WO 1995-FI331	W	19950607		

AB A novel type of starch acetate (I) with modifiable properties which is suitable for controlled release of active ingredients in formulations is disclosed. In these formulations I with distinct substitution degrees, e.g. between 0.2-3.0, are used. The starch acetate makes the process industrially feasible with good flowability and facilitates the formation of firm tablets. Hydrolyzed starch was esterified with acetic anhydride to obtain starch acetate with substitution degree of 1.81. Tablets containing propranolol.HCl (II) 25, magnesium stearate 0.5 and I q.s. 100% were prepd with 5 different compression forces. About 80% of II was released in 10 min from the tablets compressed at 5kN force, while 67-80% of II released in 30-60 min from tablets compressed at 10 kN, and as the compression force was risen to 20-25 kN, release rate still decreased.

=> dis hist

(FILE 'HOME' ENTERED AT 11:06:35 ON 13 MAR 2008)

FILE 'APOLLIT, BABS, CAPLUS, CBNB, CIN, COMPEDEX, DISSABS, EMA, IFIPAT, NTIS, PASCAL, PROMT, RAPRA, SCISEARCH, TEXTILETECH, USPATFULL, USPATOLD, USPAT2, WPIFV, WPINDEK, WSCA, WTEXTILES, MEDLINE, BIOSIS, EMBASE' ENTERED AT 11:07:03 ON 13 MAR 2008

L1	86 S HYDROPHOBIC(A)POLYMER(A)DISPERSION
L2	49 S L1 AND PLASTIC?
L3	25 S L2 AND STARCH

FILE 'CAPLUS' ENTERED AT 11:09:45 ON 13 MAR 2008

L4	28 S MIKKONEN HANNU/AU
L5	5 S L4 AND PLASTIC?
L6	7 S TARVAINEN MAARIT/AU
L7	42 S PELTONEN SOILI/AU
L8	13 S L7 AND PLASTIC?
L9	6 S PARONEN TIMO PETTERI/AU

=>

---Logging off of SIN---

=>

Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	105.33	233.85
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-24.80	-24.80

STN INTERNATIONAL LOGOFF AT 11:12:41 ON 13 MAR 2008